CAGE

Wayland
PLAN
1960

General Plan for the Town of Wayland 1960

WAYLAND PUBLIC LIBRARY
3 4869 00060 0567
Copy 1

Cage
917.444
H

·WAYLAND·FREE·PUBLIC·LIBRARY·
FOUNDED 1848
INCORPORATED EAST SUDBURY 1780
WAYLAND
FOUNDED 1835
1835

ELEANORE C. BENJAMIN
97 CONCORD RD.
WAYLAND, MASS.

GENERAL PLAN

for the
TOWN OF WAYLAND, MASSACHUSETTS

prepared for the
Wayland Planning Board and the
Massachusetts Department of Commerce

April 1960

Prepared by James L. Harris, Planning Consultant, Cambridge, Massachusetts

The preparation of this report was financed in part through an urban planning grant from the Housing and Home Finance Agency , under the provisions of Section 701 of the Housing Act of 1954, as amended.

Cage Ref.
917.444
H

gift
C. Benjamin
2/73
recat 5/80

CONTENTS

Contents

Section 1	General Summary of Proposals
Section 2	Population Projection
Section 3	Fiscal Analysis

Special Studies

Section 4	School Enrollments and Facilities
Section 5	Recreation and Open Land Preservation
Section 6	Transportation, Streets and Highways, Parking Facilities
Section 7	Municipal Services and Utilities
Section 8	Improvement of Certain Residential Areas - Urban Renewal

General Proposals

Section 9	Land Use in the Future
Section 10	Zoning and Subdivision Control
Section 11	Capital Budgeting

MAPS AND PLANS

A series of large scale maps have been prepared as a part of the General Plan for the Town of Wayland. These show the details of the physical and land use recommendations made in this Plan. Some of these are reproduced at small in the text herewith. The Planning Board has permanent, cloth backed prints at full size of most of these maps, mounted on rollers for display and study.

With the exception of the renewal study, the maps are at a scale of 1" = 500' and are prepared on base maps showing property lines and in some instances contours. The following is a list of the maps and plans which are a part of the General Plan:

no.	description	scale	reduced for text	mounted for display
1.	base map showing streets, property lines and buildings	1" = 500'		
2.	base maps showing streets property lines, buildings and contours	1" = 500'		*
3.	existing land uses	1" = 500'	*	*
4.	population distribution	1" = 500'	*	*
5.	utilities and services	1" = 500'		*
6.	recreation inventory	1" = 500'		
7.	recreation proposals	1" = 500'	*	*
8.	proposed land use plan	1" = 500'	*	*
9.	natural water shed	1" = 500'		*
10.	flood plain zoning	1" = 500'		*
11.	elementary school facilities plan	1" = 500'	*	
12.	zoning proposals	1" = 500'		
13.	condition of housing in the Dudley Pond area (urban renewal)	1" = 100'		

GENERAL PLAN FOR THE TOWN OF WAYLAND

Section 1

Summary of Proposals

The proposals set forth in this Plan are based upon what is assumed to be the desire of the townspeople to guide the growth of Wayland along lines that will preserve the pleasant character of the Town and will insure the most satisfactory arrangement of land uses in the future. The major contributions of this Plan lie in recommendations concerning the physical development of the Town and the application of the legal controls (e.g., zoning and subdivision control) over land use and development, and in developing the necessary information to anticipate the needed and desirable public facilities, programs and services.

Planning has been an important factor in the progress and development of Wayland in the past. The Planning Board was established in 1925. The original zoning bylaw was enacted in 1934; subdivision control was instituted in 1943 when the Town voted to extend to the Planning Board the provisions of the "Municipal Planning and Subdivision Control Act". Fortunately, the institution of these controls preceded the major growth that began after World War II. The population has grown from 3,900 in 1945 to an estimated 10,200 in 1960. Many new residential areas have been developed. It is estimated that the population may approach 21,500 under present density controls (zoning), when most of the usable land is developed. As this growth occurs new pressures and needs for adjustments in land use will be felt.

This General Plan is proposed as a guide in making decisions and establishing techniques for control based upon a long range view of the development of the Town and its anticipated needs. The Plan is presented in three parts:

a. a text describing the proposals making up the General Plan

b. proposed revisions in the texts of the Zoning Bylaw and the Subdivision Control Regulations of the Planning Board

c. a set of thirteen large scale maps listed and described on page ii herein

The various sections of this report of the Plan contain specific proposals and recommendations for action and guidance in determining future policies. It is essential to the beneficial use of a master plan to realize that changes in circumstances are constantly developing so as to require changes in the details of the plan.

The value of a General Plan lies in its focusing of attention upon what are believed to be the best policies and essential needs for future years and how to provide a physical solution to these needs. The Planning Board is authorized by State Statute to adopt by majority vote a master plan for the town which plan becomes a document of public record. A town may require by specific vote or bylaw that town action upon certain matters be preceded by reference to the planning board for the opportunity to report if it so desires. The adoption of a master plan can provide the guiding framework for the planning board's recommendations to the town meeting relative to matters of land use and its controls and the long range planning of town development. It strengthens the recommendations of the planning board and lends continuity to recommendations and proposals.

Synopsis of Recommendations

A. Expectations for population growth: Continued increase in population to at least 15,000 by 1970 and to a total of 21,500 at an undetermined date at which time population growth will be slowed by the lack of additional land for development.

B. Land use decisions: (1) Continuation of low density character of residential development (with the exception of certain areas in which multiple dwelling structures might be permitted under the proposed controls); (2) The preservation and enhancement of the architectural character of Wayland Center by strict adherence to present zoning and the encouragement of economically practicable uses for the wooden buildings now in the business district on Cochituate Road; (3) The expansion of industrial uses in the Sand Hill area (State Road West--west of the Sudbury River) and possibly in two other areas discussed herein; (4) Continuation of the public pressure for the Route 20 bypass south of Wayland Center, designed in a manner to fit into the future plan of land use for these areas; (5) Adoption of a program of improvement of residential properties and streets in the Dudly Pond area through the assistance available through urban renewal; (6) Vigorous efforts to supplement and to encourage the very meritorious program of the Sudbury Valley Trustees, Inc., in acquiring title, rights or easements to preserve the Sudbury River marshes and other wooded, steep or marshy areas suitable for preservation as undeveloped land; (7) The development by the Town of additional active recreation facilities and programs, both at the school sites and elsewhere as recommended.

C. Street and highway improvements: (1) The Route 20 Bypass south of Wayland Center, designed (a) to avoid the necessity of widening of Old Connecticut Path, (b) to provide grade separation and interchanges at Cochituate Road and at a location near the Sudbury River in order to accommodate the traffic from the Raytheon Manufacturing Company's Wayland Laboratory, from the retail development west of Wayland Center, from the proposed Sand Hill industrial area and from Pelham Island; (2) The improvement as needed of Rice Road, Draper and Lincoln Roads and Oxbow Road as feeder or access streets to areas of potential residential development; (3) The improvement of streets in the area surrounding Dudley Pond through an urban renewal program.

D. Zoning Bylaw and Subdivision Control Regulations: A series of minor changes in the zoning bylaw including requirements for off street parking and loading space for all uses in accordance with projected need; suggestion for consideration of a means of permitting multiple family dwelling structures through a flexible technique of density control by zoning; suggestions for zoning map changes involving the shifting of residential district boundaries and the creation of some new areas for industrial development; the tightening of road construction standards required under the Subdivision Control Law; other minor changes in the text and procedures outlined in the Subdivision Regulations of the Planning Board.

E. Capital budgeting: The development of a program of capital expenditures and the scheduling of them to provide the minimum of distortion in the tax rate and the total levy.

Base maps:

As a part of the General Plan, a base map of the Town of Wayland was prepared at the scale 1"=500', showing streets, property lines and buildings. The property lines were taken from the property maps maintained by the Board of Assessors which maps are at scales 1"=200' and 1"=100', depending upon the density of development. The buildings were located by use of aerial photographs, the assessors' maps by field inventory. A second base map at the same scale was prepared from the first by adding contour lines (at 10' vertical interval) to show the land form. The contours are those shown on the United States Geological Survey maps of this area. The remainder of the informational maps enumerated on page ii were prepared on transparent copies of one of these two base maps. The Planning Board has been supplied with

reproducible copies of both of these two base maps in order to make available to town officials and interested groups a base map for planning purposes.

Use of the reports and maps of the General Plan:

The text of this Plan is organized in sections dealing with many aspects affecting planning decisions. The details of any of these specialized considerations may be found in the appropriate section and are not elsewhere repeated. The maps are essential to the content of the Plan; many proposals of a physical nature are not adequately described in the text but rely upon the maps for clarification.

It is the intent of this Plan that the maps be kept current by periodic revisions where appropriate and that the effectuation of the recommendations herein will be made gradually over a period of years, most likely with modifications needed at the time of final consideration before action is taken.

Section 2

Population

The rapid growth of Wayland during the last fifteen years has more than doubled the population (3,900 to 10,200, estimated). The characteristics of the population are definitely those of the suburb. There is little evidence to indicate that the rate of growth will decrease as long as there remains land for residential development and an economic climate suitable to such growth. The exact rate will be influenced by many factors, most of which are related to the degree to which the subdivision of land and the building of speculative housing is financially attractive in Wayland. Such development has been attractive in the past, although Wayland has not been the location of large scale developments such as have occurred elsewhere in the Metropolitan Area. Zoning requirements are among the primary reasons for the absence of such developments.

The following table provides data showing the growth of population since 1900.

TABLE A CHANGES IN TOTAL POPULATION [1]

year	population	% change over preceeding census	numerical change
1900	2303		
1910	2206	- 4.2	- 97
1920	1935	-12.3	-271
1925	2255	16.6	320
1930	2937	23.2	682
1935	3346	12.2	409
1940	3505	4.5	159
1945	3901	11.3	396
1950	4407	11.4	506
1955	7359	67.0	2952
1960	10190 [2]	38.5	2831
% increase 1945 - 1960		161.0	6289
1945 - 1955		88.7	3458
1950 - 1960		131.0	5783

1. Data from U. S. Census of Population and Mass. Decennial Census of Population.

2. Estimated. (See Table D.)
NOTE: Subsequent to the preparation of this estimate, the U. S. Bureau of the Census announced (late May 1960) that the total population of Wayland had been tabulated to be 10,283 as of January 1, 1960 in the decennial Federal census.

The age and sex distribution of the population is shown in Figure C, a population "pyramid" depicting the size of various age groups, divided male and female, for both 1950 and 1955. The characteristics are typical of a suburb peripheral to a large city. The large number of families with children is reflected in the pattern. The age group 15-25 is not as large as might be expected; this seems to be caused by the exodus of young adults and the lower birth rates experienced in the years prior to 1942. Table B, below, shows the percent of change (1950-1955) for the various age groups.

TABLE B DETAILED POPULATION CHANGE BY AGE GROUPS

age	1950	1955	% of increase over previous census	numerical increase
under 5	541	1010	85.0	459
5 - 14	768	1402	82.5	634
15 - 24	540[1]	734[1]	36.0	194
25 - 34	660	1236	87.5	576
35 - 44	673	1086	61.5	413
45 - 54	502	888	77.0	386
55 - 64	358	501	40.0	143
65 plus	365	502	37.6	137
Total	4407	7359	67.0	2952

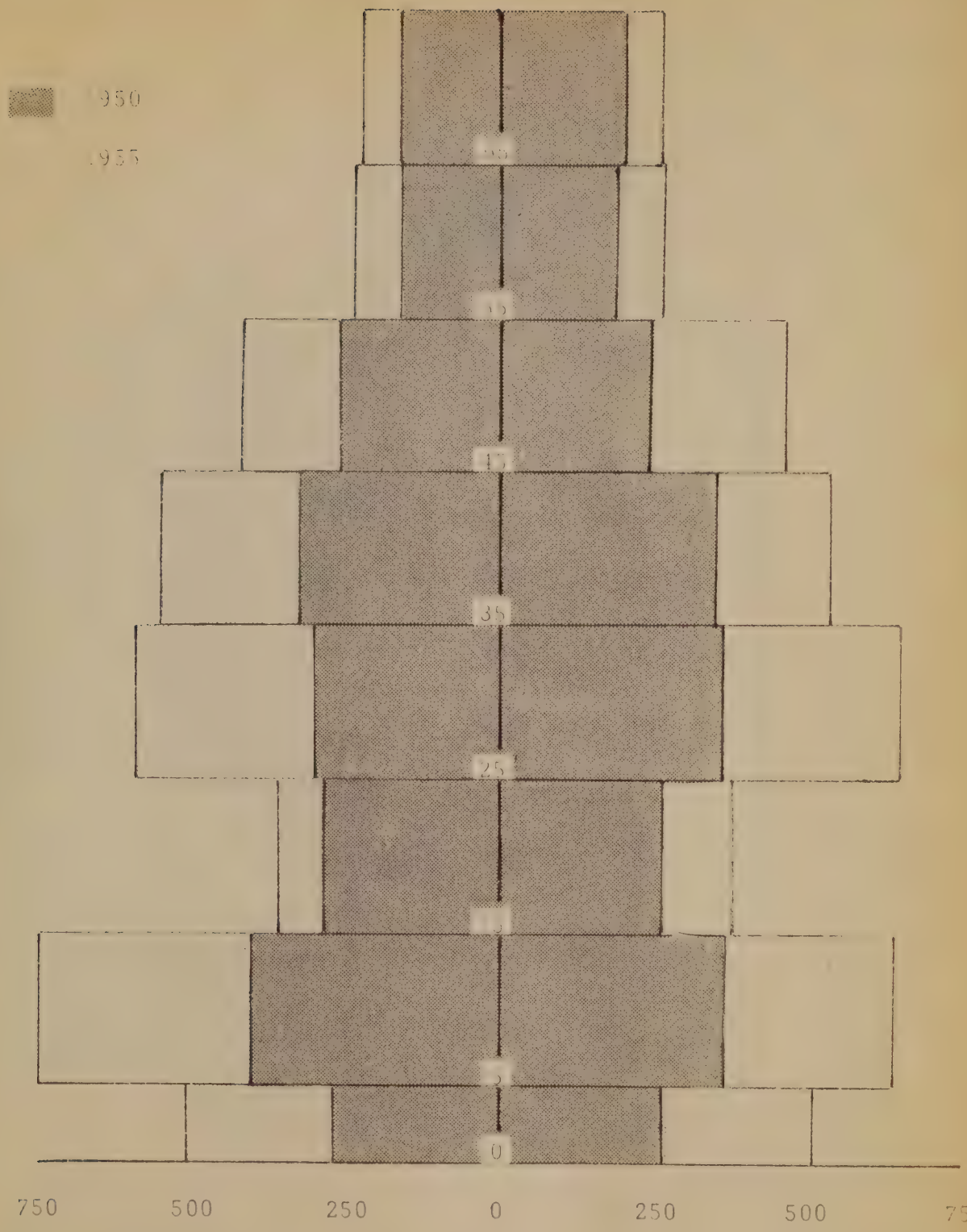
1. Some inaccuracy may exist in this age group, caused by differences in policy regarding the tabulation of students living away from home; it appears that if an error exists, the corrected numerical increase will be lower rather than higher than shown above.

The amount of detailed information about the characteristics of the population is severely limited. The 1950 Federal Census collected information relative to educational level, income, employment, place of nativity, race, in addition to condition of housing. The detailed statistics for the Town of Wayland were secured from the Census Bureau (Federal). For more recent information the 1955 Massachusetts Census of Population and Legal Voters was one source, another was the records of the Town Clerk and the Board of Assessors. The Clerk compiles an annual figure of total population. The Assessors' office maintains a total of the number of dwellings assessed.

The Projection of Future Growth

The method used to estimate the growth of population is one that makes use of the information discussed above and assumes that the economic health

FIGURE C

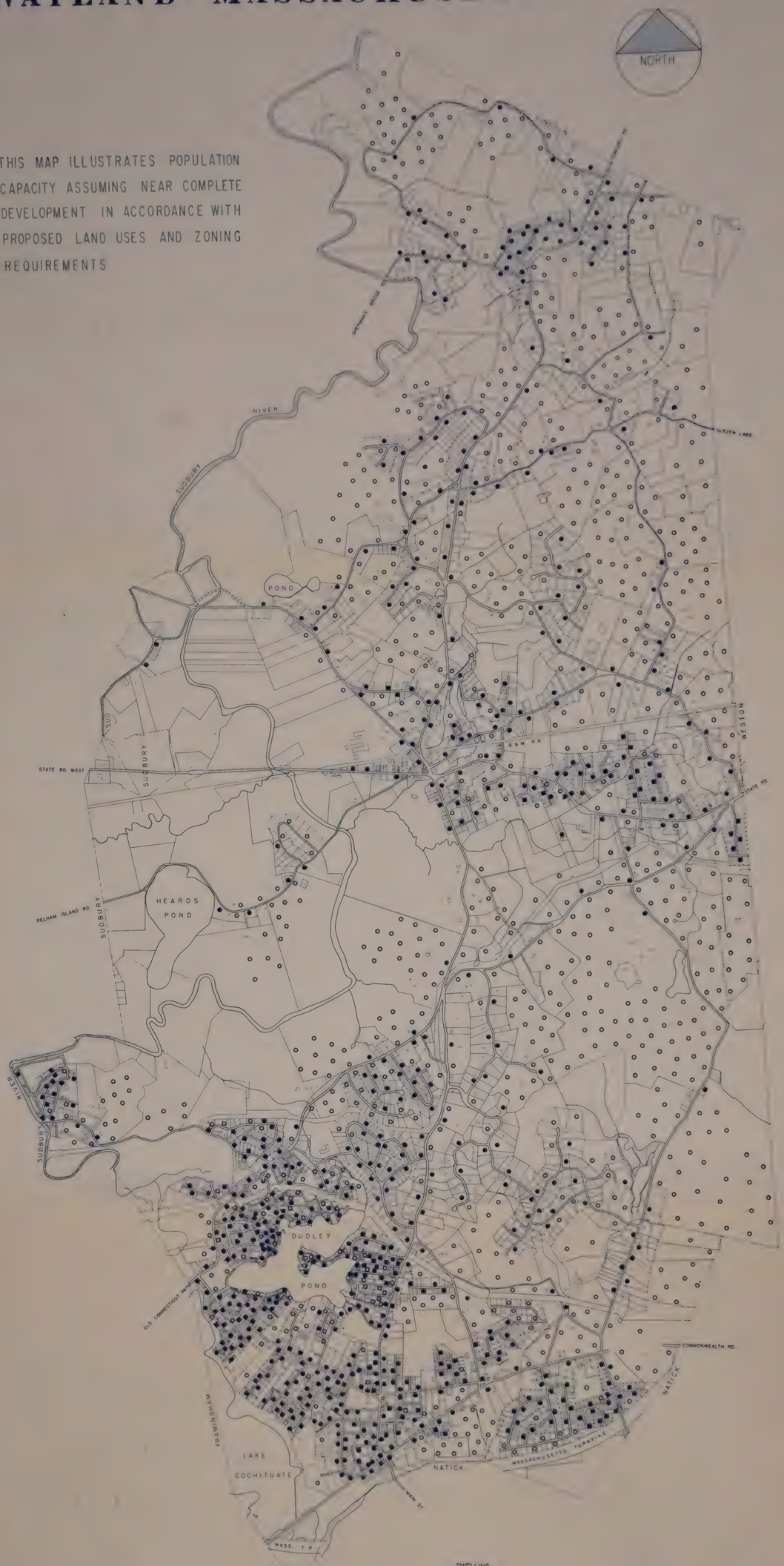


POPULATION DISTRIBUTION BY AGE AND SEX 1950 AND 1955

TOWN OF WAYLAND

Source: Federal Cansus 1950, Massachusetts State Census 1955.

POPULATION DISTRIBUTION
WAYLAND MASSACHUSETTS



4

PREPARED FOR THE WAYLAND PLANNING BOARD WAYLAND MASSACHUSETTS
BY JAMES L HARRIS-ARCHITECT & PLANNING CONSULTANT-CAMBRIDGE, MASSACHUSETTS 1959

of the region will favor continued growth. Although there is much said currently about the "return to the city", it is not the opinion followed herein that this will be a trend numerically sufficient to alter suburban growth.

As a guide for planning purposes a population of 20,000 to 25,000 seems logical to assume in anticipating community services. This has been determined by calculating the number of dwellings that can be expected in full development of all land expected to be used for residential purposes. Plan No. 4, Population Distribution, shows this projection of dwellings and the distribution of the existing population. It shows the assumptions relative to land use (in accordance with the proposals made herein for future land uses). Existing regulations concerning lot size were assumed to be maintained. It seems unlikely that any further increase in lot size will be enacted. On the contrary, the more probable eventuality is that in certain areas some form of multiple dwelling development (building types such as row houses and apartments, high and low) will be permitted. There is a discussion of this in the section dealing with zoning. It does not seem realistic to assume that Wayland will reach its full growth at any definite time. More likely are the circumstances in which its rapid growth will be ended by lack of available land for further development, after which time the remaining parcels may be held for more dense development in response to population pressures that may be felt, perhaps twenty years hence. There are some indications that recognition is developing of the need for rental housing in the suburbs, employing building types other than the single family house. The gradual intensification of population pressure will make this more justifiable.

In Table D. the population is projected through 1985 assuming that the number of persons per dwelling unit and the increase in the housing supply will follow trends similar to those experienced in the past decade. This is obviously not to be the case. On the one hand, the large increase of persons reaching marriageable age in the next 15 years and the increase in employment opportunities in the western section of the Metropolitan Area indicate an accelleration of the growth of communities in this vicinity. Conversely, the fact that much of the unused land in Wayland is in the zoning districts requiring large lot sizes may slow the rate of residential development below that experienced in the decade 1950-1960. Between these two indications one may make many different assumptions relative to growth. From the point of view of the provisions of town services (schools, etc), the exact date of need for certain facilities may not be that projected herein, but it cannot vary widely. Furthermore, it seems most likely that the long term population pressures assumed in these predictions will develop.

TABLE D POPULATION PROJECTION TO 1985

(Jan. 1) year	Estimated Total Population	Estimated No. of Dwelling Units Occupied	Estimated Persons Per D. U.	Estimated Yearly Increase in No. D. U.'s.	Bldg. Permits New D. U.'s
1950	4407[1]	1326	3.32	104	141
1951	4800	1430	3.35	184	155
1952	5480	1614	3.39	165	140
1953	6110	1779	3.43	105	181
1954	6550	1884	3.47	192	137
1955	7359[2]	2076	3.53	173	138
1956	8000	2249	3.56	190	172
1957	8760	2439	3.59	107	126
1958	9301	2541	3.61	144	132
1959	9785	2695	3.62	130	125
1960	10,190[4]	2825	3.63	130	
1961	10,760	2955	3.64	130	
1962	11,250	3085	3.65	130	
1963	11,720	3215	3.65	130	
1964	12,200	3345	3.65	130	
1965	12,680	3475	3.65	130	
1966	13,170	3605	3.65	130	
1967	13,630	3735	3.65	130	
1968	14,120	3865	3.65	130	
1969	14,570	3995	3.65	130	
1970	15,050	4125	3.65	125 (x5)	
1975	17,080	4750	3.6	125 (x5)	
1980	19,320	5375	3.6	125 (x5)	
1985	21,600	6000[5]	3.55		

1. U. S. Census of Population, 1950
2. Massachusetts Census of Population and Legal Voters, 1955
3. Commonwealth of Mass., Dept. of Labor and Industry
4. Compiled from data of Wayland Assessors and Building Inspector, and U. S. Census 1950 - Housing -Statistics
5. Estimated capacity of residential land under present zoning is approximately 5889 dwelling units; this may increase if higher densities are permitted in future years.

TABLE E TEN YEAR RECORD OF BIRTHS AND DEATHS 1950-1960[1]

year	Births[2]	Deaths	Difference	Estimated Net In-Migration
1950	109	57	52	341
1951	164	89	75	605
1952	143	72	71	559
1953	169	73	96	344
1954	208	80	128	681
1955	196	90	106	535
1956	239	89	150	610
1957	261	103	158	383
1958	243	93	150	334
1959	246[3]	74	172	233
TOTAL	1978	820	1158	4625

1. Records of Wayland Town Clerk
2. Includes still births.
3. Not complete.

In developing Table D the two factors basic to the prediction are: (1) number of persons per dwelling unit and (2) the number of dwelling units occupied. The figures for the estimated number of dwelling units occupied were established by using the 1950 U. S. Census, the Assessors' records and data from field survey and mapping. There are no statistics obtainable to determine in and out migration. There are data of the excess of births over deaths which is given in Table E above. Using these figures one can determine what the net in-migration has been. This is nothing more than an abstract number for it cannot be directly related to the increase in dwelling units occupied. Consequently, the more helpful basis of projection seemed to be the supply of housing, assuming that the number of persons per dwelling unit would not vary widely.

If this prediction proves to be valid, the population will have expanded by another 5,000 persons by 1970. The growth from 1950 - 1960 was about 5800. The Greater Boston Economic Study Committee in mid-1959 estimated that Wayland will have a population of 13,100 in 1970. This is 2000 lower than projected in Table D herein. By 1980 it is predicted in Table D that another 4300 will have been added by which time the rate of growth will have declined considerably unless the density of development is radically increased by multiple family dwelling development.

Section 3 Economic Base and Fiscal Analysis

The Town of Wayland is a suburban town within the Boston Metropolitan Area for which reason any measurement of its economic health seems more appropriately directed toward its fiscal affairs rather than toward employment opportunities within the physical boundaries of the town. The residents of Wayland are primarily employed in non-local enterprises, the number of persons employed in farming, local retail business and service enterprises is relatively small and has been decreasing in percent during the past forty years.

The laboratory of the Raytheon Manufacturing Company in Wayland Center is the largest single employer drawing its employees from many cities and towns within commuting range. Two new areas for industrial land use are under consideration, one is the Sand Hill area on State Road West, the other, adjacent to the Town of Natick (contingent upon the use of land abutting in Natick). The development of one or both of these may provide additional employment within the Town. Aside from the property tax revenue, the presence of business and industrial enterprises does not improve the economic health of the suburban community. The prosperity of the residents is related to the economy of the Metropolitan area and of the region.

The economic characteristics of the western sector of the Metropolitan area are good; job opportunities are numerous; salaries and wages are favorable. Many of the residents of Wayland are professional and business persons having employment in the heart of Boston. The economic abilities of the resident families are well above the average for families in the Metropolitan area.

In order to evaluate the fiscal position and the costs of town government a comparison is made between Wayland and twenty-one other towns of somewhat similar location and character. Three graphs are presented showing data for the median of the twenty-one towns and for Wayland showing assessed valuation per capita, tax rates and tax levy per capita. Each graph compares the median of the twenty-one towns with the position of Wayland (1). In examining the list used for comparison it can be seen that there are variations in the economic abilities of the residents and in the value of housing as a base for real estate taxation for the support of local government. Wayland is not at the top of the list but is above the median using a calculation of equalized (2) assessed valuation per capita of the twenty-one towns. There are eight towns with higher

---

(1) The twenty-one towns are:

Concord	Lincoln	Rockport
Dover	Lynnfield	Scituate
Easton	Mansfield	Sharon
Foxboro	Maynard	Sudbury
Hanover	Nahant	Wrenham
Holbrook	North Reading	Weston
Hull	Norwell	Westwood

(2) Equalized Assessed Valuation estimated by the Massachusetts Federation of Taxpayers, 1955.

estimates of assessed valuation per capita, thirteen with lower than that of Wayland. This is only relevant in showing in a generalized way the economic characteristics of the residents. Another comparative measure is the estimated family income. The 1950 Federal Census showed Wayland to be ranked as ninth in percent of families with incomes above $5,000. These data concerning income are believed to be below actual incomes in 1950 but it is assumed that they give a reliable comparison.

The townspeople of Wayland have shown themselves willing to bear the costs of good schools and a reasonably high level of community services. The three graphs presented show aspects of Wayland's position in comparison with the median of the other twenty-one towns. Chart 3-A shows that Wayland's assessed valuation per capita (actual assessment) is very similar although slightly above the median for the other towns. The tax rates are compared in Chart 3-B; Wayland's rate in 1958 was $69.00 compared to $68.50 for the median. Although it can be said to be obvious, it may be helpful to state that neither the rate nor the assessment alone are measures of the tax levy nor of the costs of municipal services. The tax levy per capita is a more adequate measure of the costs to the local government of its services. Chart 3-C shows that Wayland's levy per capita is above the median of the other towns. The following detailed comparison is made to relate Wayland's position to that of eight towns chosen from the twenty-one. These eight are very similar in character, all have experienced rapid growth since 1950. The proportion of tax revenues derived from non-residential real estate is generally comparable for the group.

Tax Revenue per capita $(AVpc \times \frac{TR}{1000})$

	1920	1930	1940	1950	1957
Concord	33.30	41.20	41.50	41.00	143.00
Dover	23.50	65.00	49.00	58.50	118.00
Lincoln	25.80	40.00	34.20	69.00	143.00
Lynnfield	37.80	49.50	41.50	68.00	126.00
Sharon	29.00	50.50	47.00	99.40	130.00
Sudbury	27.40	48.00	34.80	63.70	128.00
Weston	27.80	50.00	56.50	83.50	147.00
Westwood	30.60	40.00	35.50	62.70	135.00
Wayland	29.00	38.20	44.50	74.20	129.00

The above shows that through 1957 Wayland spent amounts very similar to most of these towns. The rapid increase in per capita tax levy since 1950 is attributable to many factors including the raising of standards of education, the construction of new schools and other municipal facilities and the effects of inflation. In 1959 the operating expenditures for schools amounted to 45.85 per cent of the total of recurring expenses. The costs of interest and amortization

of bonds financing capital improvements including schools amounted to $12.30 of the present tax rate of $71.00. Debt service (interest and principal) represented payments in 1959 of $27.15 per capita (assuming the population in 1959 was 9800). In Section 11, the suggested new capital improvements tax rate (increment of the rate directly attributable to the capital expenditure program proposed) is estimated at $3.65/ $1,000 of valuation for 1961. If the town's operating costs, as differentiated from debt service and capital expenses, continue to rise as they have in the past, a steady increase in the tax rate is indicated (see Table 11-A, Section 11) and this means a continuing rise in the tax levy per capita to keep pace with inflation, rising standards and debt service necessitated by the rapid growth in population. Chart 3-D shows the assumptions made in projecting four factors affecting future revenue requirements. These items are population, school enrollment, school operating costs per capita (population) and per pupil. The costs of education have risen sharply since 1956 because of the operating of new schools. If the cost of education per pupil develops to be less than that projected in Chart 3-D, the tax levy will be correspondingly less.

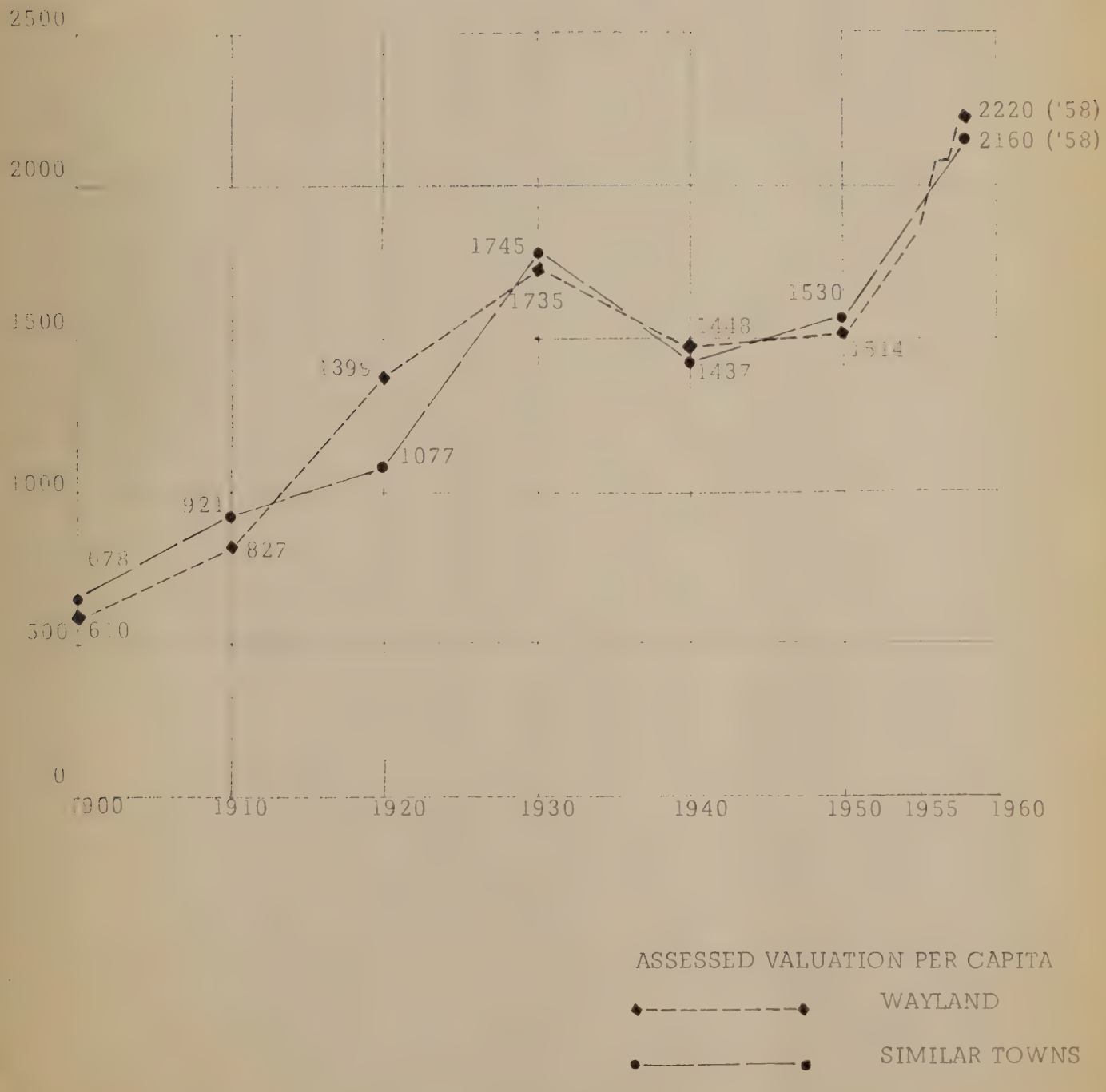
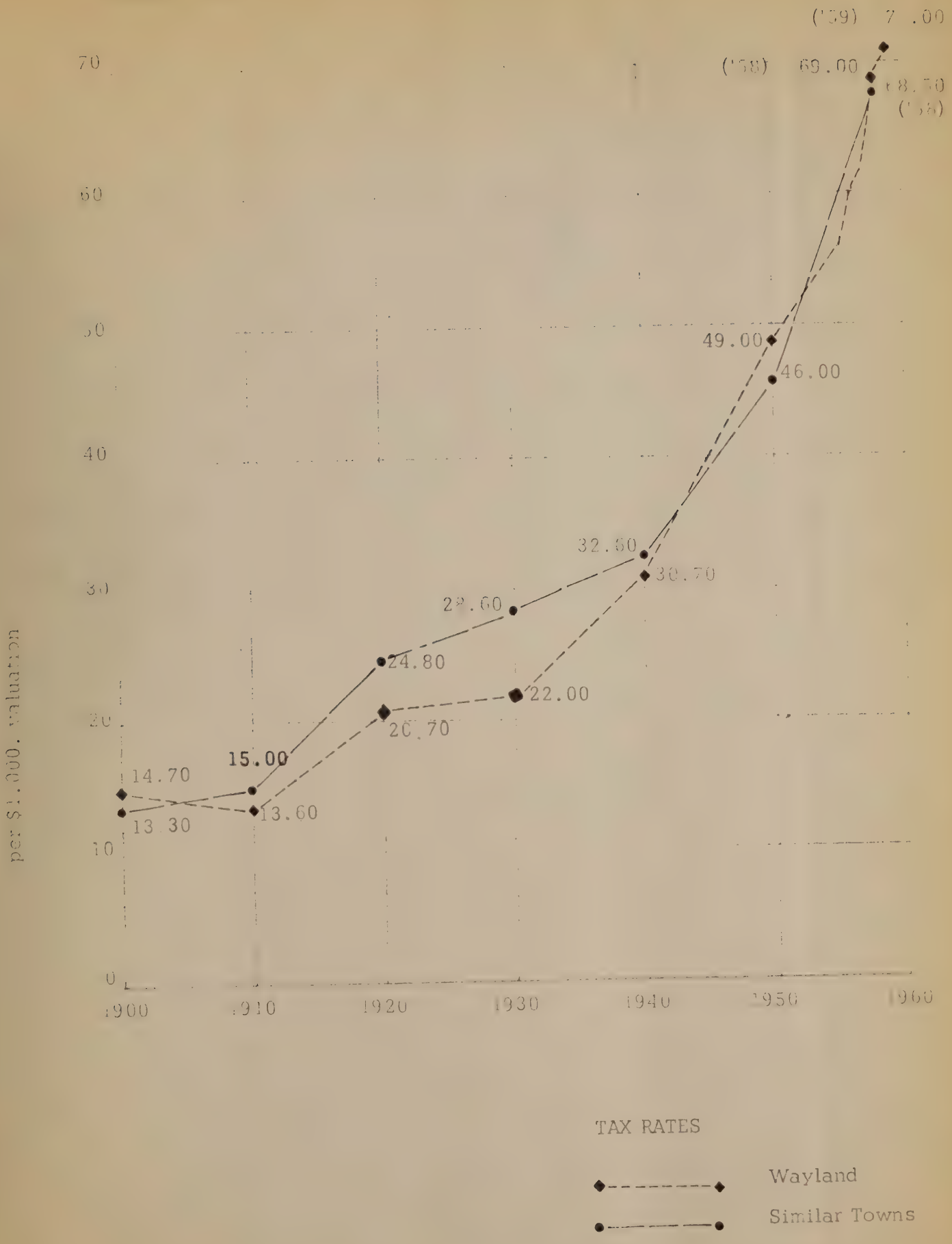

2500
2000
1500
1000
0
1900
1910
1920
1930
1940
1950
1955
1960
2220 ('58)
2160 ('58)
1745
1735
1530
1448
1514
1437
1395
1077
921
827
678
610
500
ASSESSED VALUATION PER CAPITA
WAYLAND
SIMILAR TOWNS

CHART 3-B


('59) 71.00
70
('58) 69.00
68.50
('58)
60
50
49.00
46.00
40
32.60
30.70
30
29.60
24.80
22.00
20
20.70
15.00
14.70
13.60
13.30
10
0
1900
1910
1920
1930
1940
1950
1960
per $1,000. valuation
TAX RATES
Wayland
Similar Towns

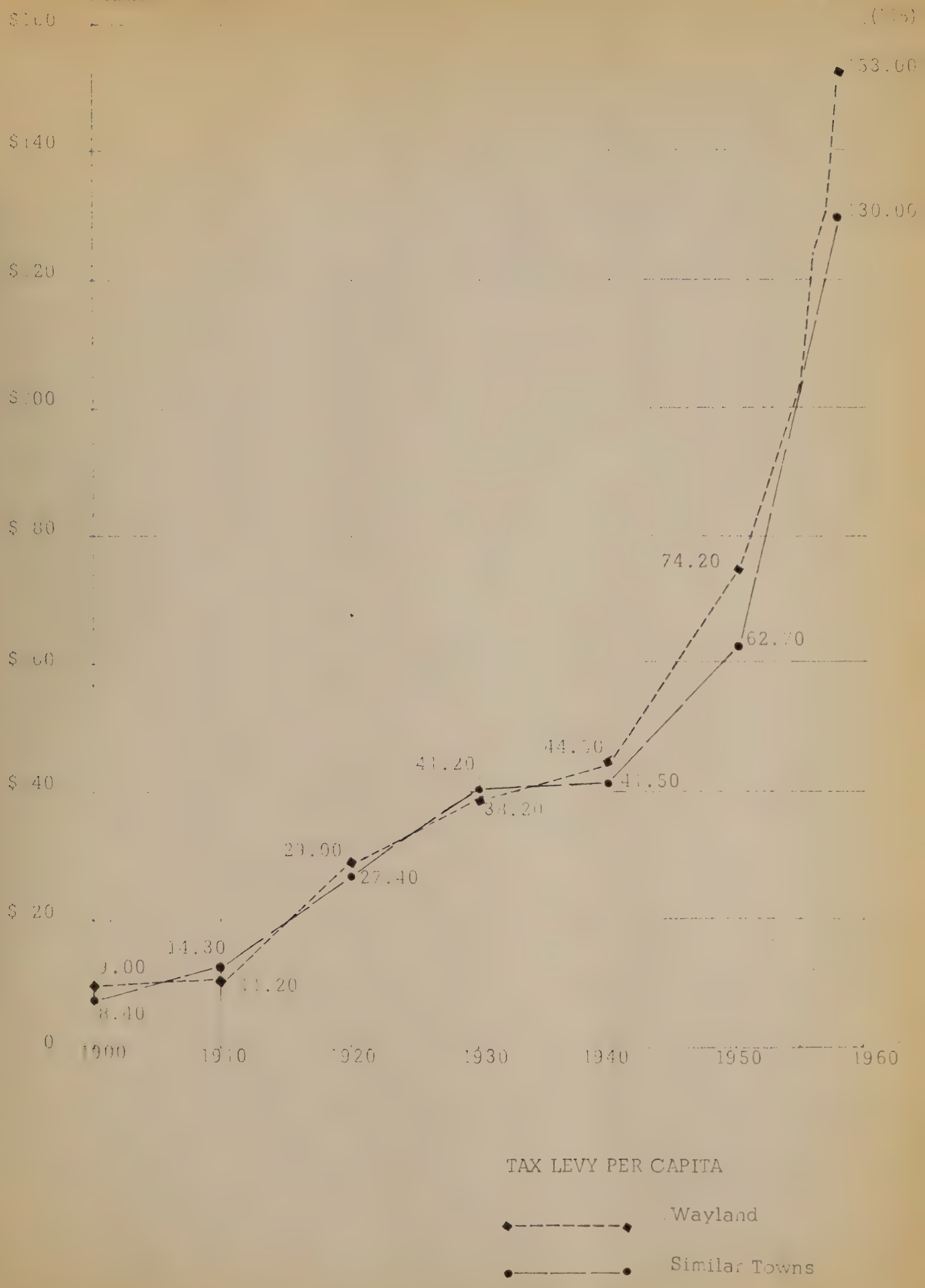
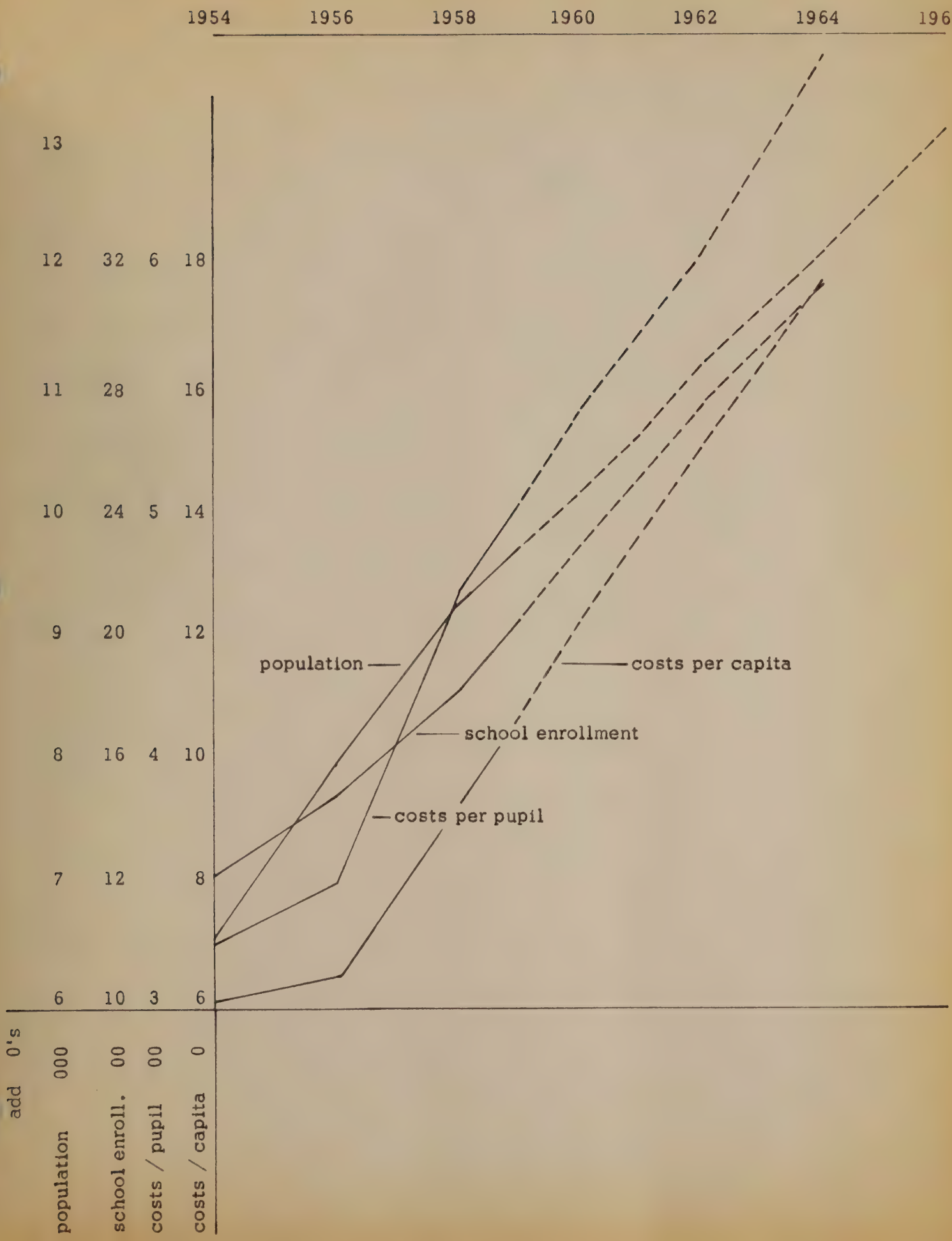
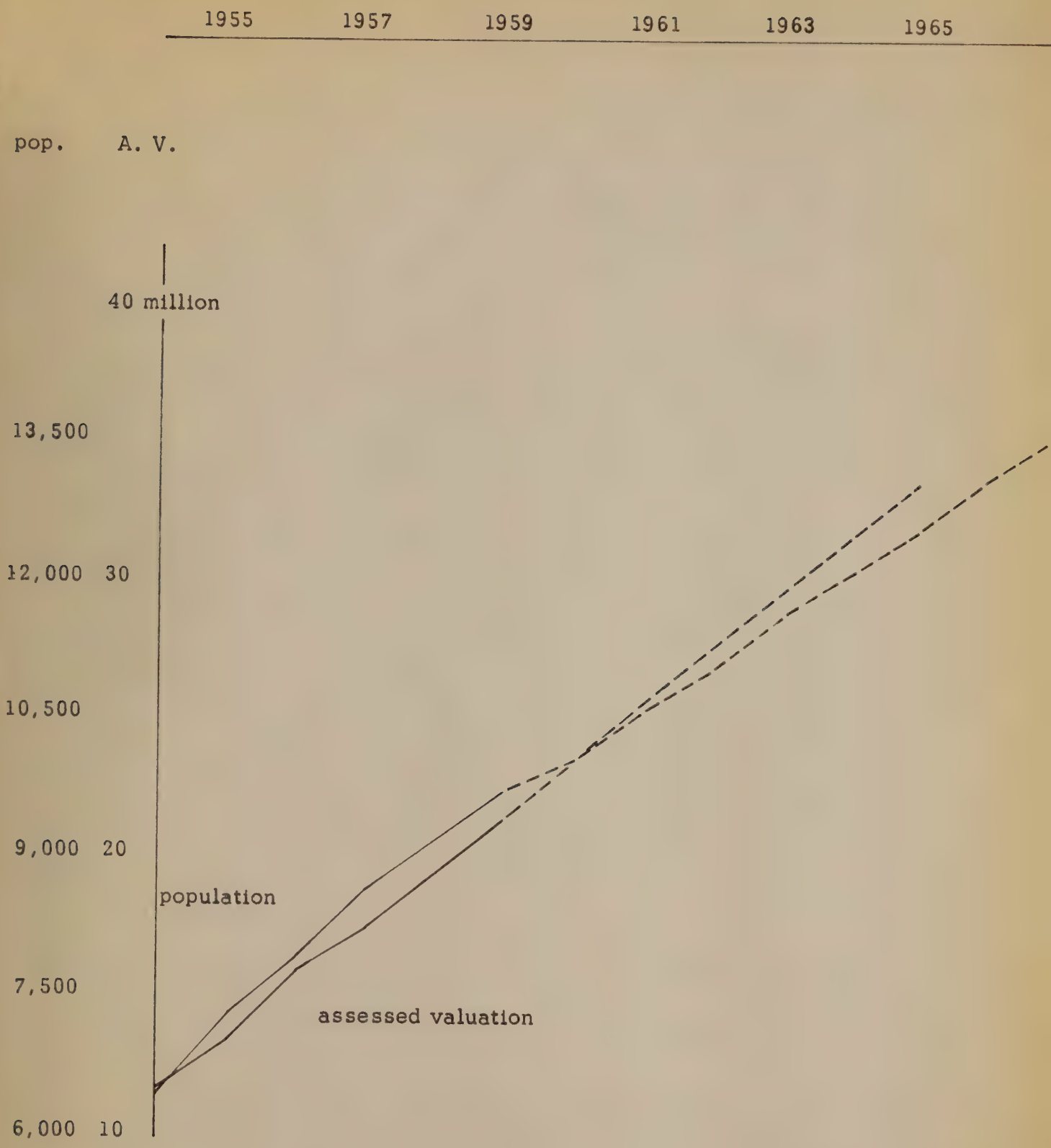

$160
$140
$120
$100
$ 80
$ 60
$ 40
$ 20
0
1900
1910
1920
1930
1940
1950
1960
153.00
130.00
74.20
62.70
44.50
41.20
41.50
38.20
29.00
27.40
14.30
11.20
9.00
8.40
TAX LEVY PER CAPITA
Wayland
Similar Towns

CHART 3-D(1)


1954
1956
1958
1960
1962
1964
1966
13
12
11
10
9
8
7
6
32
28
24
20
16
12
10
6
5
4
3
16
14
12
10
8
6
population
costs per capita
school enrollment
costs per pupil
add 0's
population 000
school enroll. 00
costs / pupil 00
costs / capita 0


1955
1957
1959
1961
1963
1965
pop.
A. V.
40 million
13,500
12,000
30
10,500
9,000
20
population
7,500
assessed valuation
6,000
10

Section 4

School Enrollments and Facilities

During the past decade school enrollments in Wayland have increased rapidly as would be expected with the population growth of this period. Three new elementary schools have been constructed, adding forty new classrooms. A new high school for 850 pupils (perhaps as many as 1100) is nearing completion for use in the fall of 1960.

In trying to anticipate the facilities needed and to develop the most appropriate academic program, the Town has sought the services of two educational consulting firms, the first Engelhardt, Engelhardt and Leggett in 1955, who proposed a long range school building program, the second, Kargman, Mitchell and Sargent in 1958, who made recommendations concerning the organization and curriculum of the proposed new high school.

The earlier report (the long range building program) proposed ten elementary schools to serve the Town in its period of peak enrollment. This was based upon a policy of locating an elementary school within a half mile radius of most residences and employing very small schools if necessary, in the lower density areas. Subsequent to this report, the various school sites and building committies and the School Committee have recommended a policy of providing only seven elementary schools, distributed reasonably evenly throughout the Town. Four of these schools exist at present; the sites for two more have been purchased; one site remains to be acquired. This arrangement assumes larger elementary schools than the Engelhardt Report proposed, but not larger than are currently considered acceptable. The school system does not include kindergarten classes at present; if such were included, the required rooms could be added to each of the elementary schools. New schools should be planned to accommodate additions for kindergarten use.

The above plan may warrant modification by constructing only one new school of capacity 600-700, in the area north of State Road and enlarging the Claypit School to receive 600-700 pupils. Such a shift to larger schools is not as easily accomplished in the southern part of the Town , where only one new school remains to be built under the present plan.

The Englehardt Report recommended that the secondary grades be organized to provide two junior high schools and one high school. This involved the conversion of the existing high school to a junior high, the early construction of a new high school and, at a much later date, the construction of a second junior high school. Sites for these two new secondary schools have been acquired; the high school is under construction and is scheduled for use in September 1960.

At this time (early 1960) the framework for future expansion of school facilities has already been established. In this General Plan, the discussion offered relative to school facilities deals with two aspects, one, a review of the probable enrollment through 1970 from which a schedule of needed construction can be approximated, and, two, an analysis of the number of families that may be expected under present density limits (imposed by zoning) in a series of subsectors of the Town and an estimate of the size of the schools needed to serve the various areas when the population of each area reaches that projected for it.

Part I. Enrollment Projection to 1970

In the section of this report dealing with population, an estimate of the number of families and of the total population of Wayland is made on the assumption that a condition of "full development" may be reached when most of the usable land now undeveloped will be utilized. As earlier pointed out, it is unrealistic to expect that population growth will halt at any specific time; to the contrary, it seems more logical to assume that the population pressures of the future years will be strong enough to bring to acceptance the increase of residential densities by the introduction of multiple dwelling types. Regardless of the speculation as to whether or not there may be appreciably greater densities in the future, the calculation made from Plan No. 4, showing the population distribution with full development under present zoning, is a conservative one. This map projection estimates that there will be 5890 dwelling units at the point of "full development". The probable distribution of these families is discussed in greater detail in the second part of this section.

Two estimates of school enrollment have been made, one high, the other more conservative; both have been based upon the determination of ratios of school pupils to total population. These ratios have been developed for the various grade groupings that are given. Tables 4-B and 4-C, included herewith, contain the details of these projections and are based upon the general population estimate made herein.

Using the larger of these two estimates with certain further increases indicated as valid from examination and projection of present enrollment, Table 4-A was developed to show what the required facilities may be for the next decade. At the time at which the new high school was planned, the following grade grouping was assumed for the school years following September 1960.

Elementary school	grades 1 - 5
Junior high school	grades 6 - 8
Senior high school	grades 9 - 12

TABLE 4-B WAYLAND SCHOOL ENROLLMENT PROJECTION (High Estimate)

school year	estimated total population (Jan. 1)	school pop. as percent of total pop.	school population	Grade Groupings 1-5	1-6	6-7	6-8	7-8	8-12	9-12
52-53	1953 - 6,110	18.47	1129	636	730	187	271	177	306	222
53-54	54 - 6,550	18.79	1231	706	823	203	294	177	322	231
54-55	55 - 7,359	17.97	1323	739	864	248	330	205	329	247
55-56	56 - 8,000	18.72	1498	854	974	251	374	254	382	253
56-57	57 - 8,760	18.31	1604	926	1042	233	367	251	419	285
57-58	58 - 9,301	19.68	1836	1017	1196	303	426	247	492	369
58-59	59 - 9,785	20.81	2036	1116	1311	382	506	311	538	414
59-60	60 - 10,190	22.62	2307	1248	1432	389	587	403	670	472
60-61	61 - 10,760	23.80	2561	1421	1628	419	627	423	712	512
61-62	62 - 11,250	24.60	2768	1532	1757	462	678	457	775	554
62-63	63 - 11,720	25.20	2953	1639	1874	495	723	488	822	591
63-64	64 - 12,200	26.00	3172	1759	2016	530	777	523	882	634
64-65	65 - 12,680	26.70	3386	1879	2152	566	829	559	941	677
65-66	66 - 13,170	27.30	3595	1993	2283	601	881	594	1000	719
66-67	67 - 13,630	27.80	3789	2100	2408	632	928	626	1054	758
67-68	68 - 14,120	28.30	3996	2215	2540	668	979	659	1111	799
68-69	69 - 14,570	28.70	4182	2318	2656	698	1024	691	1163	836
69-70	70 - 15,050	29.00	4365	2420	2772	728	1070	721	1213	873

TABLE 4-C WAYLAND SCHOOL ENROLLMENT PROJECTION (Low Estimate)

school year	estimated total population (Jan. 1)	school pop. as percent of total pop.	school population	Grade Groupings 1-5	1-6	6-7	6-8	7-8	8-12	9-12
52-53	1953 - 6,110	18.47	1129	636	730	187	271	177	306	222
53-54	54 - 6,550	18.79	1231	706	823	203	294	177	322	231
54-55	55 - 7,359	17.97	1323	739	864	248	330	205	329	247
55-56	56 - 8,000	18.72	1498	854	974	251	374	254	382	253
56-57	57 - 8,760	18.31	1604	926	1042	233	367	251	419	285
57-58	58 - 9,301	19.68	1836	1017	1196	303	426	247	492	369
58-59	59 - 9,785	20.81	2036	1116	1311	382	506	311	538	414
59-60	60 - 10,190	22.62	2307	1248	1432	389	587	403	670	472
60-61	61 - 10,760	23.00	2474	1369	1570	414	607	409	691	491
61-62	62 - 11,250	23.40	2632	1458	1670	441	648	435	735	527
62-63	63 - 11,720	23.80	2789	1547	1772	465	687	461	781	559
63-64	64 - 12,200	24.20	2952	1632	1875	493	723	486	821	590
64-65	65 - 12,680	24.60	3119	1726	1974	522	765	515	867	624
65-66	66 - 13,170	25.00	3292	1823	2082	551	807	544	919	659
66-67	67 - 13,630	25.30	3448	1912	2190	577	846	570	964	690
67-68	68 - 14,120	25.60	3614	2001	2295	604	887	597	1008	723
68-69	69 - 14,570	25.80	3759	2088	2389	629	924	622	1052	752
69-70	70 - 15,050	26.00	3913	2169	2484	655	960	646	1094	783

SCHOOL FACILITIES - ELEMENTARY
WAYLAND MASSACHUSETTS

POSSIBLE SCHOOL DISTRICTS
DETERMINED BY POPULATION DISTRIBUTION
SEE REPORT WITH TABULATIONS OF SCHOOL AGE POPULATION, PROJECTED FOR EACH DISTRICT

ELEMENTARY SCHOOL SITE

BASIC SCHOOL DISTRICT 1

AREA SEPARATELY TABULATED TO ALLOW FOR ADJUSTMENT IN DISTRICT SIZE 1A

DISTRICT BOUNDARY

WET LAND (INCLUDING ALL LAND BELOW EL 124)

0 500 1000 2000 3000 4000 5000
SCALE IN FEET

11

PREPARED FOR THE WAYLAND PLANNING BOARD WAYLAND MASSACHUSETTS
BY JAMES L. HARRIS - ARCHITECT & PLANNING CONSULTANT - CAMBRIDGE, MASSACHUSETTS 1959

By employing this arrangement the necessity for the construction of additional elementary school facilities is postponed for two years until September 1962. At present the elementary schools contain grades 1-6 inclusive. In the period from 1960 to 1965 or 1966, there will be some excess in capacity of the secondary school facilities, even though the sixth grade is shifted to the junior high school. This is unavoidable when erecting a new high school for a school system as small as that of Wayland.

It is recommended herein that as soon as practicable, the system return to the following grade grouping: elementary schools - grades 1-6; junior high school - grades 7-8; and senior high school - grades 9-12. If this is done, the high school may be adequate for grades 9-12 through June 1970, perhaps longer. The junior high school will accommodate projected enrollments through 1970. The elementary school facilities will need gradual expansion throughout the next decade, approximately as outlined in Table 4-A, amounting to an increase in capacity of 1170 pupils.

Part II. Population Distribution and its effect upon the size of the various elementary schools.

Plan Number 11 entitled School Facilities - Elementary, enclosed herewith, shows seven core districts, one for each of seven elementary schools and a series of small sectors that can be added to adjacent core districts in balancing the estimated school population to be served by each school. This is intended to serve as a guide in determining the size of each elementary school for planning purposes. At any particular time the balancing of enrollments may require variations in the boundaries of districts. The important aspect of this consideration is to determine the size of each school to fit the general expectations, not a particular peak felt at one moment.

The numbers of families, now and those to be expected with future development, have been tabulated for each sub area shown on Plan 11. In Table 4-D the likely number of elementary pupils (both grade groupings 1-5 and 1-6) are presented. From this, a series of assumptions was made establishing seven plausible districts for elementary schools as a basis for calculating the theoretical size of each school under conditions of "full development" of the Town. In Table 4-E the estimated number of pupils in each district is given. These range from 419 for the Loker School, to 607 for the Happy Hollow School. (These do not include the kindergarten age group.) From this material the capacity of each school for long range planning purposes can be estimated. If in reviewing the determination of tributary areas comprising the various districts, the school administration desires to make adjustments in district boundaries, such are readily possible by changing the assignment of some of the sub areas.

The Happy Hollow district is larger in population because of the density of development and the physical boundaries that tend to define its area. This district may be reduced by assigning sub area 4-E to the Cochituate School. This seemed unwise because the Cochituate School has a site which is substandard in area, and, even under this assignment of areas, may require an addition to increase its capacity by 90 pupils by 1970.

There is evidence of a major change in educational policy for both elementary and secondary schools, by which greater flexibility is required in the arrangement of class spaces in order to accommodate small as well as large groups, as may be appropriate to the teaching technique.

For this reason, the size of the school may be better determined by capacity of pupils, rather than by number of classrooms. Table 4-E shows that the seven elementary schools should contain approximately the following capacities for the group now described as grades 1-6:

	grades 1-6	Kindergarten
1. Loker School	419	
2. Cochituate School	441	
3. Mainstone Area	481	
4. Happy Hollow School	607	
5. Claypit School	426	
6. Orchard Lane Area	420	
7. Oxbow Road Area	429	
Total	3223	

TABLE 4-D Projection of Elementary School Pupil Distribution

district no. (see map)		no. of D. U.'s (Jan. '59)	additional no. of D. U.'s (future)	estimated number of pupils '58-'59 gr. 1-5	'58-'59 gr. 1-6	future 1-5	future 1-6
1		276	228	117	134	120	137
1A	3D	4	120	2	2	63	72
1B	3A	58	22	25	28	12	13
1C	2A	112	80	47	55	42	48
1D	2B	33	29	14	16	15	17
2		547	120	232	266	63	72
2A	1C	112	80	47	55	42	48
2B	1D	33	29	14	16	15	17
2C	4E	147	70	62	72	37	42
2D	4A	193	45	82	94	24	27
3		27	520	11	13	274	313
3A	1B	58	22	25	28	12	13
3B	4C	64	20	27	31	10	12
3C	5G	41	29	17	20	15	17
3D	1A	4	120	2	2	63	72
3E	4D	4	122	2	2	64	73
3F	5F & 6E	82	25	35	40	13	15
3G	5E	137	45	58	67	24	27
4		400	293	170	195	154	177
4A	2D	193	45	82	94	24	27
4B	6C	26	82	11	13	43	50
4C	3B	64	20	27	31	10	12
4D	3E	4	122	2	2	64	73
4E	2C	147	70	62	72	37	42
5		136	350	58	66	184	211
5A	7A	8	74	3	4	39	45
5B	7B	21	64	9	10	34	39
5C	6A	21	41	9	10	22	25
5D	6B	63	43	27	31	23	26
5E	3G	137	45	58	67	24	27
5F	3F & 6E	82	25	35	40	13	15
5G	3C	41	29	17	20	15	17
6		137	240	58	67	126	145
6A	5C	21	41	9	10	22	25
6B	5D	63	43	27	31	23	26
6C	4B	26	82	11	13	43	49
6D	7C	54	47	23	26	25	28
6E	3F & 5F	82	25	35	40	13	15
7		219	370	93	107	194	224
7A	5A	8	74	3	4	39	45
7B	5B	21	64	9	10	34	39
7C	6D	54	47	23	26	25	28

TABLE 4-E

SAMPLE CALCULATION OF ULTIMATE ELEMENTARY SCHOOL NEEDS
Estimated number of classrooms by selected school areas

school area district no. (see map)	estimated no. of d.u. (present & future)	estimated no. of pupils (ultimate) (1)		estimated number of classrooms required (2)			
		1-5	1-6	1-5 @25	1-5 @30	1-6 @25	1-6 @30
Loker 1 1a, 1b, 1d	770	368	419	14.7 (15)	12.3 (12)	16.8 (17)	14.0 (14)
Cochituate 2 2a	859	384	441	15.5 (16)	12.8 (13)	17.6 (18)	14.7 (15)
Mainstone 3 3b, 3c, 3e	827	420	481	16.8 (17)	14.0 (14)	19.2 (19)	16.0 (16)
Happy Hollow 4 4a, 4e	1148	529	607	21.2 (21)	17.6 (18)	24.3 (24)	20.2 (20)
Claypit Road 5 5e, 5f	775	372	426	14.9 (15)	12.4 (12)	17.1 (17)	14.2 (14)
Orchard Lane 6 6a, 6b, 6c, 6d	754	367	420	14.7 (15)	12.2 (12)	16.8 (17)	14.0 (14)
Oxbow Road 7 7a, 7b	756	372	429	14.9 (15)	12.4 (12)	17.2 (17)	14.3 (14)
Total	5889	2812	3223	113.9 (114)	93.7 (93)	129.0 (129)	107.4 (107)

(1) Based upon Table 4-D in which the "ultimate" number of pupils is estimated under the assumption of "full development", as defined in Section 2.

(2) Should educational policies require varied sizes for class spaces (other than the classroom for 25-35 pupils), the capacity can be judged from the anticipated enrollment contained herein for each of the seven school areas.

TABLE 4-F School Enrollment Projection

RATIO: $\frac{\text{enrollment by grade groupings}}{\text{total population of Town of Wayland}}$ = expressed as a per cent

TABULATION OF RATIOS used in preparing low estimate

school year	total pop.	Grade Groupings 1-5	1-6	6-7	6-8	7-8	8-12	9-12	1-12
52-53	6,110	10.41	11.95	3.06	4.43	2.90	5.01	3.63	18.53
53-54	6,550	10.78	12.56	3.10	4.49	2.70	4.92	3.53	18.86
54-55	7,359	10.04	11.74	3.37	4.48	2 78	4.47	3.36	18.07
55-56	8,000	10.67	12.17	3.13	4.67	3.17	4.77	3.16	18.75
56-57	8,760	10.57	11.89	2.66	4.19	2.86	4.78	3.25	18.31
57-58	9,301	10.93	12.86	3.26	4.58	2.65	5.29	3.97	19.72
58-59	9,785	11.40	13.40	3.90	5.17	3.18	5.50	4.23	20.81
59-60	10,190	12.25	14.05	3.82	5.76	3.95	6.57	4.63	22.60
60-61	10,760	12.72	14.60	3.85	5.64	3.80	6.42	4.61	23.00
61-62	11,250	12.96	14.85	3.92	5.76	3.87	6.53	4.68	23.40
62-63	11,720	13.20	15.11	3.97	5.86	3.93	6.66	4.77	23.80
63-64	12,200	13.38	15.32	4.04	5.93	3.98	6.73	4.84	24.20
64-65	12,680	13.61	15.56	4.12	6.03	4.06	6.84	4.92	24.60
65-66	13,170	13.84	15.84	4.18	6.13	4.13	6.98	5.00	25.00
66-67	13,630	14.03	16.05	4.23	6.21	4.18	7.07	5.06	25.30
67-68	14,120	14.17	16.24	4.28	6.28	4.23	7.14	5.12	25.60
68-69	14,570	14.33	16.40	4.32	6.34	4.27	7.22	5.16	25.80
69-70	15,050	14.41	16.48	4.35	6.38	4.29	7.27	5.20	26.00

TABULATION OF RATIOS used in preparing high estimate

60-61	2,561	13.21	15.13	3.89	5.83	3.93	6.62	4.76	23.80
61-62	2,768	13.62	15.61	4.11	6.03	4.06	6.89	4.92	24.60
62-63	2,953	13.98	16.00	4.22	6.17	4.16	7.01	5.04	25.20
63-64	3,172	14.42	16.51	4.34	6.37	4.29	7.23	5.20	26.00
64-65	3,386	14.82	16.96	4.46	6.54	4.41	7.42	5.34	26.70
65-66	3,595	15.13	17.34	4.56	6.69	4.51	7.59	5.46	27.30
66-67	3,789	15.41	17.66	4.64	6.81	4.59	7.73	5.56	27.80
67-68	3,996	15.69	17.97	4.73	6.93	4.67	7.87	5.66	28.30
68-69	4,182	15.91	18.23	4.79	7.03	4.74	7.98	5.74	28.70
69-70	4,365	16.08	18.41	4.84	7.11	4.79	8.06	5.80	29.00

SECTION 5

Recreation and Open Land Preservation

These observations and recommendations were made to the Wayland Planning Board and to the Town in early 1959 in a report published in The Town Crier issue of February 27, 1958. The text of this report is reproduced herewith with minor changes that have been made in light of comments and helpful criticisms that have been received in the interim.

The active recreation facilities proposed for each school site are intended to represent a statement of potential need and use for a population of approximately 17,000 persons. It should be understood that the important aspect for the immediate future is to insure that sites are large enough for this scale of development and that the topography and site planning of each school area be evaluated in light of the projected need. Early purchase of the land to accommodate whatever plans are adopted for recreation is urged. The Town of Wayland is extremely fortunate in its topography and in the inclinations evidenced in policies of land use controls in recent decades. There already is established as reservation a sizeable quantity of land; there is interest, appreciation and activity in open land conservation and in active recreation leadership. It seems most important to foster this interest and action as a matter of continuing policy.

The recommendations of this section are summarized below in a synopsis which preceeds the detailed proposals. The accompanying plan illustrates the sites and recommendations set forth for recreation land and open space reservation.

Synopsis of Recommendations

1. Public play lots and apparatus areas for pre-school children on the basis of one such area per 100 families in areas where the lot size is 30,000 square feet or less.

2. Seven playgrounds developed at the seven elementary school sites (either existing or planned). These playgrounds shall have facilities for all ages, with emphasis on those for the 6-14 years of age.

3. Three playfields, one at each of the junior and senior high school sites, to provide facilities for the School Department's program of physical education and athletics as well as for youth and adult use.

RECREATION LAND PROPOSALS
WAYLAND MASSACHUSETTS

7

PREPARED FOR THE WAYLAND PLANNING BOARD WAYLAND MASSACHUSETTS
BY JAMES L. HARRIS-ARCHITECT & PLANNING CONSULTANT-CAMBRIDGE, MASSACHUSETTS 1959

4. A continuation of the policy of the School Department to permit the school gymnasiums, locker rooms, meeting rooms, classrooms, music, arts and crafts facilities to be used by groups composed of adults or children, provided that adequate leadership and supervision is supplied. Such will be provided by the expanded public recreation program or by such private groups as the Junior Town House.

5. Town-wide facilities:

   a) A tract acquired for future recreation use at the east end of Dudley Pond.

   b) Improvement of the Town Beach facilities on Lake Cochituate by providing more courts and areas for games, by encouraging the use of boats and by the provision of docking or mooring facilities.

   c) Acquisition of a tract in the Rice Road area for forest preserve, for hiking and for development as a ski slope.

   d) Acquisition of land or easements to increase the number of bridle paths, hiking trails and walks to permit easier access to school sites and to connect the various tracts of land reserved for public use and appreciation. This will include the construction of side walks in certain instances to assist pedestrians in reaching the school sites and recreation areas.

6. A program of purchase by the Town of Wayland with public funds of wooded lowlands and marshlands in the Sudbury Valley watershed to supplement the program of acquisition by the Sudbury Valley Trustees, Inc. Close coordination with the Massachusetts Department of Natural Resources and the Sudbury Valley Trustees regarding the program by which certain lands now in their natural state can be permanently established as reservations for public use and appreciation.

7. A gradual increase during the next five years in funds spent for recreation program leadership to reach a level of approximately $1.15 per capita (about $11,000 based upon present population) per year. Some of this can be raised by use fees and participation charges. Wayland

(through its Park Department) now spends about forty cents per capita for program supervision, mostly for operation of the Town Beach. For operation and maintenance, present budgets of the Park Department will have to be increased as this department is given more areas and facilities for which to be responsible.

8. The appointment of a five member Recreation Advisory Committee to assist the Park Commissioners in expanding the program and facilities and to serve as liaison with the citizen groups active in recreation and conservation in Wayland. It is further recommended that by 1962, the Park Department be reorganized as a Park and Recreation Department with five commissioners.

9. The employment, when recommended by the recreation committee, of a recreation director, at first on a part-time basis but eventually as a full-time arrangement when the program grows and develops.

10. An acquisition and development program to provide the recommended land and facilities at a rate to keep pace with the growth of population. It is proposed that land acquisition be given priority in order to insure that it will not be used for other purposes. This includes the seventh elementary school site that has not yet been selected and purchased.

Recreation in Wayland

Space Standards:

In considering a plan for recreation facilities and a program for a community which has the density characteristics that Wayland now has, and can expect to have under present zoning requirements, there is considerable modification required in accepted recreation standards. Particularly in this the case in the northern precinct where the lot size requirement is larger. The distance that children and adults must travel to the nearest playground, playfield or other facility has to be greater than is generally considered desirable in more dense urban areas. It may well be that for many families, children have to be transported by car even to the playground at the nearest elementary school.

For such suburban communities it is still necessary to have facilities, particularly for the age group 14 years and under, located as close to each home as practicable. In low density areas this tends to result in acreage per capita above

what would be encountered in denser areas. This is to say that National Recreation Association and other accepted standards for public outdoor recreation space for urban areas are not applicable to communities such as Wayland where the particular circumstances justify space well in excess of such standards. The policy to locate the elementary school sites in a dispersed pattern gives opportunity to use the school sites as year round playgrounds. This increases the area per capita in recreation use. In addition, Wayland's topography is such that it is very desirable to place in public or semi-public hands a number of areas that do not lend themselves to active development, (public or private) but are great assets aesthetically and from the point of view of wild life conservation, hiking, fishing and the like. The above is stated to point out that the land being acquired by the excellent program of the Sudbury Valley Trustees plus what may be acquired by the Massachusetts Department of Natural Resources under the Bay Circuit Plan may amount to a great deal more land reserved for recreation, parks and open space than a strict interpretation of any current standards might warrant.

Resources:

In addition to having already adopted a dispersed school plan which will be the framework for playground locations, Wayland has a remarkable number of natural resources for recreation, namely:

A. Water resources such as:

Lake Cochituate
Dudley Pond
Heard's Pond
Baldwin's Pond
Reserve Reservoir on Rice Road
Mill Brook
Various other streams tributary to the Sudbury River

B. Topographic features such as hills for trails, skiing, riding, etc.

C. Swamp areas for reserves and wild life sanctuaries, i.e., the Sudbury marshes and several other areas.

D. Wooded areas which can still be preserved as forests and wild life preserves.

The program of the Junior Town House, a non-profit organization founded in 1943, has given leadership and impetus to a number of activities and projects of

a recreational and educational nature. Every encouragement should be given to this organization to continue to take the responsibility for programs and projects of community participation. Through this group and others more specialized in interest, Wayland has the citizen support needed to have an expanding and varied program of activities, beyond what is actually sponsored or provided by any public program by the Town.

Population:

The present population of Wayland is approximately 8,500 persons. The ultimate population is estimated to be between 16,000 and 18,000 assuming that some buildable land will remain as open space in private hands and that present zoning requirements as to lot size will be maintained. The seven elementary school sites are planned to be spaced in approximate proportion to the density of families. This means that as an average each school site and its playground serves one seventh of the expected population or approximately 2,500 persons (using 17,500). The three playfields at the high and junior high schools will serve about 6,000 persons each (as a measure in comparison with the standards included in the appendix).

Specific Proposals:

1. Pre-School Children's Areas

In the zoning districts requiring a minimum lot size of 20,000 and 30,000 square feet and where the existing pattern is at least this dense, it is recommended that publicly owned play lots (or privately owned if possible) be provided, each to serve approximately 100 families. Fourteen such lots are proposed as follows: four are on sites now held by the Town, one exists as the Hannah Williams Playground and the remaining nine are to be acquired. These are shown on the accompanying recreation plan. In so far as possible, groups of interested families nearby should be encouraged to provide the equipment and supervision. Each site should have sand boxes, a wading pool, a jungle gym or similar devices, swings, slides, seesaws and similar equipment of small scale.

For less dense areas the Town's recreation program should include encouragement of private facilities for the very small children, such to be in private yards equipped and supervised by the neighboring families.

It is recommended that the Town acquire in the immediate future the sites needed for these small lots. There are several instances where a developer of a

Residential area has been required by the Planning Board to reserve a small parcel for public Park use in order to give the Town the opportunity to purchase such. It is recommended that a review of all such reserved areas be made immediately and that the Town acquire the appropriate ones before the period of reservation terminates. One of these pre-school children's lots proposed herein is on such a parcel. A regular system should be developed for Town purchase of small areas in sizeable subdivisions under the recommendation of the Planning Board. Authority is now vested in the Planning Board to require reservation of such parcels for ultimate purchase by the Town.

2. Playgrounds

It is recommended that the seven elementary school sites be the locations at which facilities are developed for active recreation for the age groups 6-14 years, plus some facilities for younger children and for youth and adults. The obvious advantage to this is that the School Department will need the majority of these facilities for their physical education and athletic activities. The use of these areas on a year round basis will not present any serious conflicts in schedule. Provision should be made for toilet facilities, either separate or those of the school. The program already adopted by the Town for elementary schools projects a total of seven sites listed below:

Cochituate School (existing, to be expanded)
Happy Hollow School (existing)
Loker School (recently completed)
Claypit Hill School (recently completed)
Two schools in the northern part of Wayland for which the sites have been purchased.
A school in the vicinity of the intersection of Old Connecticut Path and Rice Road, which site has not been selected.

At each site (school site) the following areas and equipment are recommended.

An area for younger children (up to 8 years) including:

Primarily an apparatus area with space for informal games, to include swings, seesaws, slides and similar equipment.

If the demand develops in any of these playgrounds for use by pre-school children, wading pool, sand boxes and small scale apparatus would be required. The use of the school playground by pre-school children will occur chiefly in

Precinct 1 if at all, since separate areas are recommended for most of Precinct 2.

A shelter house or covered area as part of the school would be desirable.

Grassed play areas with space and court layout, etc., for:

Informal games (separate area from the fields).

Field area for such games as softball, soccer, touch football and mass games. (Certain fields and courts can be laid out to overlap or be superimposed, e.g., spring and autumn sports). These should include space for:

One Little League baseball field (also for school use).

At least two softball diamonds one of which should have extended base lines for adult use.

One touch football field.

One soccer field.

Two volley ball courts, two badminton courts.

One horseshoe area.

Paved area for:

Informal games, particularly for the younger children.

Other formal courts for games as the interest among the older children and the adults warrants such, e.g., handball, shuffleboard, tennis and basketball.

If necessary, parts of these paved areas can serve as auxiliary parking.

Lawn area to flood in winter for ice skating.

In some instances: outdoor theatre
picnic area

In the case of every school except the Cochituate School there are usable areas of 5 to 7 acres for these facilities. This means that for playgrounds there will be about 40 acres for an ultimate population estimated to be 17,000 or 1 acre per 425 persons, which is well above the National Recreation Association standard for 1 acre per 800 persons for playground area.

At the Cochituate School, the Town Playground, containing 4.6 acres, is immediately adjacent. This area now contains a Little League baseball field with lights and stands, a practice softball or baseball field, and an unkept tennis court. The proximity of the site of the proposed junior high school will permit some of the activities for older children to take place there. For this reason, any further development of the restricted site at this playground should be oriented toward serving the school's needs and the needs of the younger children up to 12 years of age.

3. Playfields

Three playfields, one at each of the junior high schools and at the high school (in accordance with the long range plan of the School Department) are recommended. These will have outdoor athletic facilities for the School Department's program plus facilities designed for use of the youth and adults of the community. The most complete se6 of facilities is proposed for the new high school site, which building is in the planning stage at present.

The following is proposed as the ultimate facilities for the two junior high school sites (one is the present high school in Wayland Center; the other is in Cochituate north of East Plain Street):

Court and lawn game areas

At least two tennis courts.

Four volleyball courts (either lawn or paved).

Lawn space for four badminton courts.

Outdoor basketball courts, paved - 2 for boys, 2 for girls.

Lawn area for informal games (approximately 1 acre).

Small paved area for miscellaneous games requiring pavement.

Area for flooding for ice skating.

Fields for boys (and adult use)

Two touch football fields with four softball diamonds overlapping.

Space for track (1/4 mile) in anticipation of requirements of the school program.

Space for portable stands.

One soccer field which may have softball diamonds superimposed.

One regulation baseball diamond (mostly for adult use).

Fields for girls (and adult use)

One field hockey area.

Four softball diamonds (combined with hockey and soccer).

Archery range.

One soccer field.

Specialized functions as interest develops

Outdoor theater.

Picnic and fireplace facilities.

Day camping site.

In the case of the present high school some additional land is needed in order to accommodate all the fields recommended herein. This may be accomplished by filling some of the marsh that is presently a part of the school site. The area south of the present baseball diamond extending close to Pine Brook would, if filled, make more useable the area at the extreme south of the site. This latter part is above the marsh at present. This would increase the useable area for the school site to 25 or 26 acres.

For the senior high school site on Old Connecticut Path West which has about 60 acres above the marsh land, the following is proposed as the ultimate facilities for Town and school use.

Court and lawn game areas

At least four tennis courts.

Six volleyball courts (either lawn or paved), separated in location, 3 for boys, 3 for girls.

Lawn space for six badminton courts.

Outdoor basketball courts, paved - 3 for boys, 3 for girls.

Lawn area for informal games.

Small paved area for miscellaneous games requiring pavement.

Two handball courts.

One or more areas for flooding for ice skating.

Fields for boys (and adult use)

One football field with 1/4 mile track.

Space for stands.

At least one practice football field with two softball diamonds superimposed.

One soccer field with two additional softball diamonds superimposed.

One regulation baseball diamond with backstop and stands.

One or more additional baseball diamonds superimposed on some of the other spaces required.

Fields for girls (and adult use)

Two separate fields laid out for either field hockey or soccer.

At least four softball diamonds.

Archery range (space for several groups simultaneously).

Specialized features

Outdoor theater (reasonably close to school building).

Possibly a band shell.

Picnic and fireplace facilities.

Day camping sites.

4. Use of School Department buildings.

The School Department has permitted and encouraged the use of its indoor facilities for athletics, meetings, arts and crafts work, theater, etc. These facilities have been available upon request provided adequate leadership and supervision is supplied.

The present high school has a regulation size gymnasium which can be subdivided into two practice spaces. All four elementary schools have playrooms (smaller than high school regulation size basketball courts) for athletic activites. These are now being extensively used in the school department's after-school athletic program and by parent groups (primarily at night). Two new schools, one the high school now under construction and the other a junior high school will contain gymnasiums or athletic arenas or cages such that indoor sports areas will be available for community use.

The playrooms of the elementary schools will serve the students of that age group (6-14) plus certain adult groups interested in physical exercise but not so concerned with using full size basketball courts. At the elementary schools, space and equipment should be provided for adult exercise classes as well as organized games other than basketball. The junior and senior high schools will have indoor basketball courts of full adult regulation dimensions for use of high school groups and younger adults.

When all seven elementary schools and the three secondary schools are completed, there will be indoor athletic facilities to provide a generous community program. The libraries, classrooms, auditoriums and special training rooms should be available for community use for drama groups, arts and crafts classes, and meetings of all sorts.

The Town of Wayland, through its recreation staff, should endeavor to give the community the fullest use of the indoor facilities of the school system. This is to say that new activities should be initiated by the recreation staff when possible, without interfering with or discouraging any programs of the private groups such as the Junior Town House.

5. Town-wide facilities

It is recommended that certain specific facilities for town-wide use be developed, in addition to those described in the preceeding sections.

a) The first is the acquisition of approximately 4 acres of land at the eastern end of Dudley Pond for future recreational use. The elimination of pollution of Dudley Pond and the improvement of streets and areas contiguous to it will add to the desirability of a recreation area in this location.

b) At the Town Beach, further development of courts for outdoor games such as basketball, volleyball, badminton, horseshoes, etc., is proposed. There is the opportunity for more boating activity by Town residents if mooring and docking facilities are provided. This would be partially self-supporting since it could be operated on a fee basis. It is proposed that a small area for pre-school children's use on a year round basis be developed to serve the immediate neighborhood as well as the summertime users of the beach. (This is part of Proposal Number 1.) This area should be partially fenced, contain small scale apparatus and wading pool if necessary to supplement the beach (for use of very young children) and possibly some type of shelter.

c) For skiing, hiking, picnicking and nature study, the acquisition of a hill site in the area between Rice Road and the Weston Town line is recommended. The slope that appears most desirable for skiing is wooded at present and would require improvement by

removing trees and stumps and doing some grading to make useable some wide trails for skiers of varying skills. Detailed investigation of the slopes and the growth should be made to make certain that this particular tract is the most suitable in the general area. There are one or two other hills nearby which may be possibilities.

d) The Town of Wayland offers an opportunity to preserve woods roads, bridle paths, hiking trails that may now exist and to establish a network of such to connect the open reserve lands of the Town and of the Sudbury Valley Trustees. It is proposed that a careful survey of the present legal status of the existing trails, woods roads and abandoned roads be made. From this a program of acquisition of easements or actual purchase can be planned. Suggested paths and connections are shown on the accompanying recreation land map.

In addition to this, it is strongly recommended that a network of paved sidewalks and paths be established to encourage the walking to and from recreation sites and schools. In light of the fact that most of the active recreation facilities will be at the school sites, these paved walks would serve a dual purpose. This is not to suggest that all children would be able to walk to school, only those within a reasonable distance. Where traffic hazards exist, police assistance should be provided to assist younger children in reaching the school sites. For access to the recreation facilities in after school hours or in the summer, these walks and paths will make it much safer for children bicycling and walking.

In a number of instances the bridle paths and woods roads can also serve as walks to school and recreation facilities. In such instances a width of six feet could be paved, the remainder of the pathway left in sod. As the areas contiguous to these paths are developed for residential use, care should be exercised by the Planning Board to preserve them. In establishing these trails, etc., it is important to anticipate the subdivision of parcels where such is to be expected.

Sidewalks generally along only one side of existing streets should be constructed by the Town in instances where school and recreation sites require connections to residential areas. These sidewalks need not follow the grades of the streets nor is it necessary to remain within the present right of way of the streets where an easement or actual patnway can be acquired elsewhere. In new subdivisions, it is recommended that consideration be given to reserving

pathways for Town purchase to serve the purposes outlined herein. In addition, where appropriate, under subdivision control, sidewalks should be required, generally on one side only of the new ways.

It is recommended that this be given high priority by a program of planning and acquisition of rights of way and easements.

6. Preservation of open spaces

There are two programs directed toward the conservation of open space in Wayland, that is, in addition to any efforts of the Town itself. One is the program of the Sudbury Valley Trustees, Inc., a group with which most Wayland residents are familiar, formed in 1953 to acquire or at least assure for preservation much of the wooded and marsh areas in the Sudbury Valley watershed. Its activities have been chiefly in Wayland to this date. By gift and purchase this group has acquired considerable acreage of marsh and wooded land, well distributed throughout the Town, including land north of the Standby Reservoir near Rice Road, an area in the Upper Mill Brook basin, areas in the Sudbury marshes along the river, land south of Sherman's Bridge Road, parcels in the Wash Brook basin north of Heard's Pond, and lands at the southern end of Heard's Pond.

The Massachusetts Department of Natural Resources is authorized to make plans for and to procure (title, easements etc., by gift and by purchase when funds are made available) a continuous crescent of open land encircling the Metropolitan Area of Boston. This is called the Bay Circuit, plans for which were first proposed about 30 years ago. The Sudbury Valley is a link in this "circuit" with much of the marsh land included in the preliminary determination of the land desired as open area. The intent is such that no conflict of interest need arise between the Department of Natural Resources and private groups holding land for preservation in its natural state. To date, no land in Wayland has been acquired by the State under this program.

A program of purchase by the Town of wooded lowlands and open marshlands in the Sudbury Valley watershed is recommended for immediate investigation to supplement the program of the Sudbury Valley Trustees, Inc. It is vital to preserve these lowlands which now are obtainable at moderate cost but which will not remain so as development of the metropolitan area continues for another decade. These marshlands are unique in providing habitat for a large quantity and a wide variety of birds. The marshlands, particularly the areas around Heard's Pond, are the most important and unique recreational asset of the Sudbury Valley. The preservation of the natural habitat is considered to be the <u>most critical</u> factor in

d etermining the continued survival of wild bird life. Until such time as the State Legislature appropriates funds for the Massachusetts Department of Natural Resources to procure land (by eminent domain) for the Bay Circuit, the entire responsibility rests with the Sudbury Valley Trustees, Inc., which group is making strenuous efforts to interest donors in giving land and to raise money for purchase. The time element is so critical, that assistance is needed from the Town of Wayland if the objectives discussed herein are to be achieved. Close liaison by the Park Department, its Advisory Committee and the Planning Board with the Sudbury Valley Trustees and with the Massachusetts Department of Natural Resources is urged in order to make the most of opportunities to acquire land which should be preserved as natural areas.

The Town appointed committee (Annual Town Meeting 1953) requested to report on recreation sites, recommended among other things, that certain forested areas of low lying land be preserved as reservations. This committee in its final report in 1957 cited five areas listed below:

"1. The low-lying forest and marshlands surrounding the brook between Oxbow Road on the west and Red Barn Road on the east.

2. The low land surrounding the upper reaches of the Mill Brook lying generally north of Claypit Hill Road, west of Concord Road, and south of Glezen Lane, being attractive forest and low land including about four acres of cranberry bog and a two-acre pond.

3. Land surrounding Pine Brook lying generally east of Cochituate Road, south of State Road east, west of Pine Brook Road, and north of the Aqueduct, being attractively forested low land through which flows a substantial stream.

4. Land north of the auxiliary Reservoir at Rice Road, lying generally west of Rice Road and south of Mainstone Farm.

5. The low forest land lying between Heard's Pond and the Sudbury River."

The Sudbury Valley Trustees, Inc., Have already acquired some land in areas numbers 2, 4, and 5. This committee report is cited to reinforce the evidence that there is strong Town interest in preserving these areas.

7. Funds for recreation

The National Recreation Association recommends as a standard that communities spend about $3.50 per capita for recreation. Of this amount, one third is suggested for program leadership, two thirds for maintenance and operation of facilities.

The Town of Wayland, outside of its School Department, spends very little for what might be classed as program leadership. About 40 cents per capita is spent for supervision of facilities, chiefly at the Town Beach for life guards and matron. Although it is most desirable for organizations like the Junior Town House, the Red Cross, and special committees and groups to provide program direction and instruction, there is need for a Town program to encourage the use of the facilities that are now and will be usable for recreation. Recreational programs other than active athletics need to be encouraged and developed, for which a Town program is needed. Private groups can be counted upon to assist these programs but not to take the sole responsibility for organizing and providing instruction and leadership.

It is proposed that the Town of Wayland increase the funds voted to the Park Department specifically for recreation leadership to approximately $1.15 per capita, gradually over a four year period, 1959 to 1962. This will mean about $11,000 or 12,000 by 1962.

Wayland does not operate under a typical situation in regard to maintenance and operation expenses since the Park Department maintains the outdoor areas of all Town owned property including the public schools. This makes comparison to standards inapplicable. In any case, the development of the active recreation facilities proposed herein, will necessitate greater expenditures for maintenance and operation. At present, the Park Department spends about $2.20 per capita for maintenance and operation.

8. Responsibility for recreation

Since this report is recommending a further development of recreation facilities and programs, it is proposed that a five-member Recreation Advisory Committee to the Park Department be appointed immediately to work with the Park Commissioners, the Planning Board and other official and private groups to make plans for a recreation program of increased scope. It is further recommended that by 1962 the Park Department be changed to a Park and Recreation Department with five Commissioners rather than three as at present, (in conformity with Section 2 of Chapter 45 of the Massachusetts General Laws). The advisability of continuing the Recreation Advisory Committee should be determined after the expansion of

the program is well advanced and the Park Department expanded as proposed. (The 1958 Annual Town Meeting voted to create a Recreation Advisory Committee, which committee has been in operation since its appointment.)

9. Staff

It is proposed that the Park Department employ by 1959 or 1960 a recreation director on a part-time basis if a qualified person can be found, willing to serve on this basis. The National Recreation Association is able to assist in finding people experienced in recreation leadership. By 1962 it is recommended that the director be employed on a full-time basis. The remainder of the staff for program direction should be on a part-time basis, relying on private groups such as the Junior Town House for assistance.

10. Acquisition and development program

A suggested schedule for the first four years is as follows:

a) Acquire and promote the development of the pre-school children's areas proposed herein. In some instances these are reserved areas in recent subdivisions awaiting Town purchase or reversion to private use. In some instances, the play areas are proposed on land already owned by the Town. In nine cases, acquisition from private owners is necessary.

b) Develop at least a part of the facilities recommended at the following school sites (some already partially developed):

1. The present high school site (needs more area for developed play fields)

2. Happy Hollow School

3. Claypit Hill School

4. Loker School

5. Begin the grading, loaming and grassing of the play areas at the junior high school site and at least one of the two elementary school sites in the northern part of Wayland.

6. At least 5 tennis courts (including the reconditioning of the two not used).

c) Acquire the following parcels:

1. The wooded hill tract for skiing, hiking, etc., between the Weston Town line and Rice Road.

2. The seventh elementary school site, also in the Rice Road area.

d) Develop plans for acquisition of the site at the east end of Dudley Pond after study has been given by the Planning Board to the possibilities of redeveloping for residential use the area surrounding this site.

e) Present requests to the Town for funds to purchase areas of marshland and wooded lowlands in cooperation with the Planning Board and the Sudbury Valley Trustees, Inc.

Discussion of Specific Aspects of the Recreation Proposals

A. Tennis

The ratio of public tennis courts to population proposed by the National Recreation Association is one court for each 2,000 persons. On this basis, Wayland would require 5 courts at present and about 9 ultimately. If public interest warrants it, more than these are justified. This report has recommended that 4 courts (only 2 counted for community use) be constructed at the high school, 2 at each of the junior high schools and the remainder of the number to reach this ratio be built at the elementary schools, particularly those more remote from the high or junior high school sites (for better distribution). This is not to say that tennis courts are not justified for use of the older elementary pupils; only to say that the students at the junior and high schools will make more use of them. The rehabilitation of the 2 courts, one in Cochituate and one in Wayland Center, is proposed as an early step.

B. Hunting

The Sudbury marshes and the Heard's Pond area are one of the most important habitats for birds in eastern Massachusetts. In light of the present day recognition that the preservation of the habitat is the all important factor in conserving wild life, it seems entirely feasible to permit hunting in the marshlands

and underdeveloped areas of the Town under conditions which insure safety. Hunting in close proximity to developed areas is obviously undesirable, as is the overuse of the remaining areas. A plan is needed which

a) protects these areas against encroachment by development.

b) creates buffer areas to protect built-up residential areas against the dangers of hunting.

c) controls the number of hunters by issuing permits each season and by providing adequate policing.

C. Fishing

Although fishing is now an important form of recreation in town, it could be made more effective and more permanent under policies that encouraged State stocking of ponds and streams, limited the use of areas and, again, insured against pollution or encroachment by development.

D. Use of the Sudbury River.

The river is potentially a great asset to the region as a canoeing stream, particularly if the awakening interest in preserving the river results in conserving the remaining wilderness areas in the Sudbury and Concord River valleys. Ultimately, after pollution is eliminated, the river can be expanded. This valley is important as a regional asset for recreation and should be conserved for public use under policies that prevent destruction of the natural beauty by overuse and abuse.

APPENDIX I

NATIONAL RECREATION ASSOCIATION: Standards for active recreation spaces:

1) Types of areas:

Playlots: 1/4 acre and up, serving primarily pre-school children.

Neighborhood playgrounds: 3 - 7 acres, within 1/4 to 1/2 mile of the families served.
Average area of 1 acre for 800 population.

Playfields: 12-20 acres, within 1/2 to 1 mile of the families served.
Average area of 1 acre for 800 population.

2) Indoor facilities:

Recreation building:	1 such building for each 20,000 within 1 mile radius.
Gymnasium	1 for each 10,000 or less.
Auditorium	1 for each 20,000 or less.
Social room or playroom	1 for each 10,000 or less.
Games, arts, crafts, etc.	1 for each 10,000.
Indoor swimming pool	1 for each 50,000.

Section 6

Transportation, Streets and Highways, Parking Facilities

Although Wayland is served by rail and bus service to Boston and other regional destinations, the principal means of transportation, both commercial and personal, is by automobile and truck. As an integral part of the Boston Metropolitan Area, Wayland contains major highways carrying connecting traffic in both east-west and north-south directions, plus some long distance regional traffic (chiefly on Route 20). The major super highways in this vicinity are Route 128 (circumferential around Boston) and The Massachusetts Turnpike (toll road extending from Route 128 west to New York State). Aside from the Turnpike which passes through the southern tip of Wayland, Route 20, State Road, carries the highest volume of traffic of any main highway within the Town. This traffic is chiefly commuters' trips and local movements; there is some long distance commercial traffic that does not patronize the Turnpike. The long range plan of highways in the region does not include the construction of any new super highways through any part of Wayland. The construction of Interstate Route 495 (outer circumferential) will stimulate activity and growth in the area between 495 and 128 and will further increase traffic on the major routes in Wayland, particularly Route 20.

The accompanying traffic flow map shows the relative volumes of traffic on major routes in Wayland, exclusive of The Massachusetts Turnpike. In the future the commuting and other short distance movements in and through Wayland can be expected to increase as the land development intensifies in this sector. The improvement and changes proposed for highways in this report are shown on Plan No. 8 and include the following:

1. The relocation of Route 20 to a new right of way in order to bypass Wayland Center as shown on the accompanying map. The volume of traffic on this route is high and will undoubtedly continue to increase as more employment opportunities and new residential developments are located in Wayland and west of it in the nearby towns. The Massachusetts Department of Public Works has contemplated this bypass for a number of years. The project has not to date achieved a high enough priority for execution. The volume of traffic, present and anticipated, is sufficient to make imperative the use of design standards that will insure that the improved roadway will be capable of handling the maximum in volumes of traffic. The very least in design specification for any new construction should provide that the road be limited in access from abutting property, divided in direction to avoid left turns and facilitate safe movement and that intersections with major routes or connections to large concentrations of parking space for industry or retail business be handled with grade separations and interchange ramps.

It is recognized that, short of complete relocation, the specifications for that part of Route 20 from Robinhood Ten Acres east to Route 128 (through Wayland

Raytheon
Route 27
Route 126
RR
RR
WAYLAND CENTER
Route 20
Retail business area
RR
Sudbury River
Proposed Wayland by-pass
Robinhood
Ten Acres

and Weston) cannot include limitation of access nor frequent grade separations. In spite of these limitations, it is urged that sufficient funds be spent to increase the capacity of Route 20 from 128 westward to meet future demand. Land takings on one side of the present roadway may enable the use of the present way as one half of a divided artery. This may also permit the preservation of existing trees where there are such. The intersections at Ten Acres and at Old Connecticut Path should be designed to encourage the use of the bypass and avoid the residential areas for which protection from traffic is sought. Designs for these intersections are suggested on Plan No. 8.

In the vicinity of Sand Hill, the new location of Route 20 may follow that of the present roadway or be constructed to cross the marsh thereby remaining south of the railroad. Part of the area adjacent to State Road in the Town of Sudbury is now used for business and industrial purposes. The projected land use of a much wider area in both Towns is for industry. This will mean a large increase in industrial land in the Sand Hill section. In order to preserve the usefulness of Route 20, it is recommended that a road plan be developed for the Sand Hill section (as discussed in Section 9) by which traffic to the various industrial sites is channeled onto one or more feeder streets. These, in turn, will intersect with Route 20 at sufficiently distant intervals to permit the handling of the traffic intersections with channelization techniques or partial grade separations. Even though the traffic generation is not great at present in the Sand Hill area, it will become so as the land proposed for industrial use in the two towns is developed. If the State does plan the bypass to continue into Sudbury south of the Boston and Maine Railroad tracks, it may be possible to use the present Route 20 roadway as an access road to industrial sites and to design the interchange with the bypass at the same point at which the traffic from the Raytheon Manufacturing Company and the retail center will join the bypass.

2. At the east end of Route 20, it is recommended that most of the through traffic using Old Connecticut Path from the Weston boundary to Cochituate Road be directed to use the bypass and Cochituate Road. The use of one way traffic will aid in reducing the traffic seeking to use this section of Old Connecticut Path. It is proposed that no major improvements be made to Old Connecticut Path until after the bypass is constructed and the intersection at the Weston boundary redesigned. Although this section of Old Connecticut Path will serve as an access to Rice Road and other streets developing as this section is subdivided for residential building, its use for through traffic can be avoided after the bypass is built. Old Connecticut Path is a beautiful road and should not be altered unless such proves to be essential after the bypass is constructed. This policy necessitates waiting for the building of the bypass to determine what improvements, if any, are needed in Old Connecticut Path.

3. Consideration has been given to the possibility of relocating Route 27 to run from its present position in Sudbury along the river to Route 20, rather than to enter Wayland Center on Old Sudbury Road. This might serve as an access to the Sand Hill area industrial uses. It is doubted that this relocation would reduce traffic on Old Sudbury Road passing through Wayland Center unless the design of Route 27

were such that it was appreciably more convenient to reach Route 20 earlier than at Cochituate Road or at Robinhood Ten Acres.

4. Improvement of several other roads is proposed. The first is Rice Road in order to allow it to be the major access street to a sizeable area (now undeveloped). The development of this area will depend upon new residential streets constructed under the Planning Board's rules and regulations dealing with subdivision control. For this area Rice Road is reasonably well located to serve as a main feeder street. It is diffucult to expect land owners to subdivide in a manner that creates any separation in the function of ways or coordination with an area plan. Such may be possible but is very unusual in that property lines and divergent interests frustrate such coordination. However it may be justified to employ the assessment to abutters of a part of the costs of improving Rice Road under the Betterment Act.

The second way proposed for improvement is the combination of Draper Road and Lincoln Road for much the same set of reasons as were cited above for Rice Road. This involves the laying out of an adequate right of way and the construction of a travelled way adequate to serve as a feeder street to adjacent residential land. Already subdivision in the vicintiy of Draper Road is taking place. The proper access to this area necessitates the improvement of an existing way or the construction of a new access road. Draper Road is well located to grant access to this area as it develops.

Oxbow Road is another example of an existing way needing improvement in layout and construction. Here it seems particularly appropriate to employ the betterment assessment procedure for a part of the costs since the way does not serve as wide an area as the other streets named and therefore is proportionally of greater benefit to the owners of land abutting the street.

Construction of New Ways Under Subdivision Control

The most important local control over the provision of new streets is the power exercised by the Planning Board in carrying out its function under the Subdivision Control Law. The Board is made responsible for the adoption of regulations governing the subdivision of land. Chapter 41 of the General Laws of the State of Massachusetts contains the enabling legislation for subdivision control by the local planning board. The law defines a subdivision as one requiring the provision of a new way. One of the fundamental purposes of this law is to insure adequate layout of new ways and the legal authorization to require that the subdivider install the utilities and construct the roadway. Since 1943 the Wayland Planning Board has supervised the provision of new ways whenever subdivision was involved.

Aside from the width of the right of way and its travelled surface and the details of construction, the Planning Board has also the responsibility to guide the location of ways toward the end result of a coordinated and efficient network of

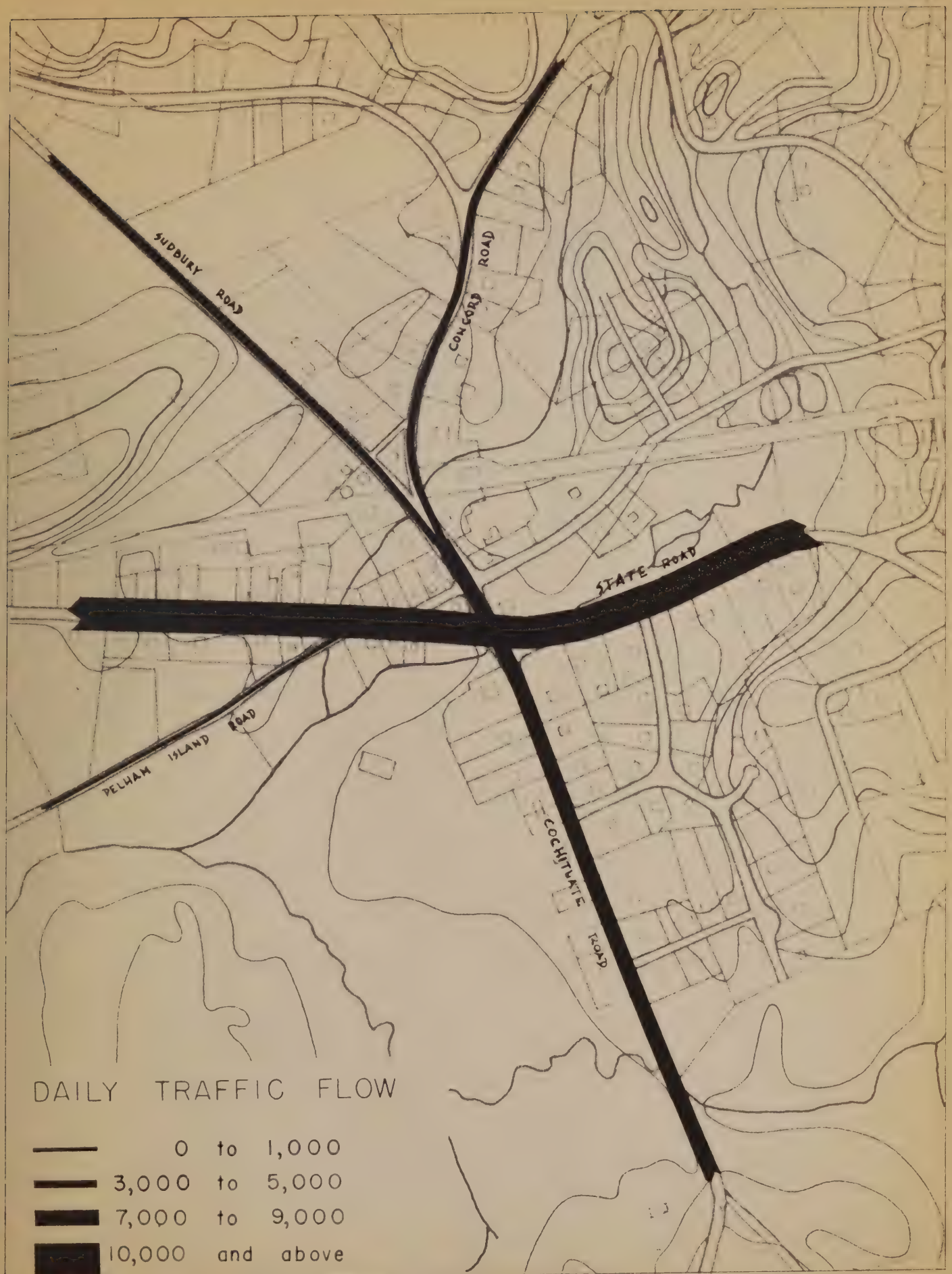
roads so that as many homes as possible can be located on streets that are not feeder streets for large residential sections or are links in the area traffic pattern. In practice, it is economically unfeasible to limit development of houses along major existing ways in favor of new residential streets. The costs of street improvements and utilities are great enough to induce development of all usable frontage, either on new ways or existing streets. The Planning Board has only limited effectiveness in controlling the street pattern as it develops in residential areas under subdivision control. The primary achievement of subdivision control as it applies to streets is the power to determine the quality of street construction and to supervise the actual work, thereby requiring the subdivider to provide a new way of acceptable standards and avoiding the probability of future expense to the municipality.

Parking Facilities

Off street parking requirements in connection with new construction in both Business Districts A and B are currently in force through the Zoning Bylaw (as amended in 1956). The proposals for amendments to the Zoning Bylaw made as a part of this General Plan include off street parking for all uses in all districts in accordance with estimated need. The percent of coverage of lot by buildings is also restricted by zoning (at present and in the proposals) in order to insure that there will be sufficient lot area for off street parking in most instances.

The recently established Business District B areas of Wayland Center and Cochituate are large enough to permit conformity to the parking requirements of the Zoning Bylaw. The "Village Shopper" development in Wayland Center has provided off street parking in conformity with zoning. There is sufficient land to accomodate expansion of this development. In Cochituate the large area southeast of the intersection of Commonwealth Road and Main Street is of such size as to accomodate off street parking for any new uses.

From a metropolitan point of view it is desirable to encourage the use of rail and bus transportation to Boston destinations. At present the prospect for sound economic support for rapid transit service on the Boston and Maine rail line seems very remote. It is possible that a Metropolitan plan for expansion of rapid transit service will be developed. In this case parking space in addition to that at the Wayland Station will be needed. No further consideration of this is proposed until such time as the demand for more parking space is felt.


SUDBURY ROAD
CONCORD ROAD
STATE ROAD
PELHAM ISLAND ROAD
COCHITUATE ROAD
DAILY TRAFFIC FLOW
0 to 1,000
3,000 to 5,000
7,000 to 9,000
10,000 and above

Section 7

Municipal Services and Utilities

The Town of Wayland supplies to its residents the following services: water, fire and police protection, public health services, public library (two locations), welfare assistance, disposal dumps (no collection service), recreation leadership and facilities, public cemeteries. These are in addition to the public school system, public roads and streets and many other general functions of government. No public system of sewage disposal is in existence nor is any contemplated at present.

In this planning program two maps were prepared, one is Plan No. 5 showing the water distribution systems and hydrants for fire protection, and locations of fire and police stations. The other is Plan No. 9 illustrating the natural water shed areas and the stream courses as an aid to the Planning Board in developing solutions to the surface water drainage, particularly in connection with subdivision approval. The Everett M. Brooks Company is currently preparing transparent overlays of each sheet of the property maps[1](1"=200' and 1"=100') to show drainage courses and easements of record, plus the location and nature of drainage structures. These overlays will enable the Planning Board to reproduce copies of the property maps with the drainage information included.

Drainage, Sewage and Water Distribution

The maintenance of adequate records concerning drainage easements and construction is being provided for as described above. The Planning Board's regulations governing the subdivision of land authorizes the Board to require of the subdivider a satisfactory system for surface water drainage in connection with the construction of a new way. The Town through its Highway Department is responsible for providing adequate solutions to the drainage problems in connection with existing public ways (responsibility may be shared with the State and the County for certain main routes).

The most difficult surface water drainage problem occurs in Wayland Center during periods of flooding of the Sudbury River. The streets in the Center itself are at such elevation that they are flooded if the

---

1 The Town maintains property maps, revised annually.

level of the river rises to an elevation as much as 121 feet above sea level. The storm drainage system for this area collects water and disposes of it via Mill Brook and Pine Brook to the Sudbury River. There appears to be no easy solution to prevent the infrequent flooding such as was experienced in August 1956 when the level of the Sudbury River reached the elevation 121.5 feet above sea level. One possible solution might be in the construction of a dike to prevent the river water from entering the brooks during flooding; this would necessitate impounding the water in the brooks above the town center and the gradual releasing of it when the level of the river permitted. Such a plan would require some pumping of water into the river if satisfactory and sufficient reservoir space could not be found near to the center. Another solution may be in the raising of the level of the streets above the expected flood level. This would be expensive and complicated as a general solution (except for Pelham Island Road where it is essential). The nature of the flooding in the Sudbury Valley is such that the duration of any flood period can be reduced by impounding water upstream as is now being done but the intensity of the flooding is hard to reduce. The large flood plain area and the sluggish movement of the water toward the Merrimack River combine to make it difficult to prevent flooding in periods of extremely heavy rainfall.[2] The frequency of such flooding and its depth in the center does not seem to warrant heavy expenditure by the local government. Basements are subject to flooding in this area but the safety of life is not directly threatened; the flooding may cause added health hazards by sewage disposal failure. The provisions of the present Zoning Bylaw prevent building on terrain that is below the elevation of 125 feet above sea level without a permit from the Board of Appeals as a special exception. The Board of Health and the Planning Board are alert to the hazards of additional building in the flood plain throughout the town and are making efforts to avoid the creation of new hazards or situations requiring town remedy.

The raising of the roadway of Pelham Island Road is under consideration at present in order to avoid isolating the inhabitants of the Island during flooding of the Sudbury River. Egress from the Island into Sudbury to the southwest is also blocked by the river. Essential communication and emergency services are most logically maintained to this area from Wayland. It is recommended herein that the rebuilding of Pelham Island Road be coordinated in design with the Route 20 Bypass as discussed and illustrated in Section 6. In addition to Pelham Island Road, there are other less critical instances of roads in the flood plain: Oxbow Road, Sherman's Bridge Road and an area (mostly owned by the town) in the Stonebridge section.

---

2. Soil Conservation Service, United States Department of Agriculture

There has been no serious consideration of a town wide sewage disposal system because of the cost and of the fact that the density requirements (lot size) and soil characteristics are affording satisfactory sewage disposal by septic tanks and leaching fields in the subdivisions developed since 1945. Most but not all of the buildings erected prior to this have lot areas adequate for safe disposal. The Board of Health supervises the details of installation of the individual systems. The Planning Board's regulations and the zoning bylaw are further controls to avoid inadequate sewage disposal. In the Dudley Pond area there have been many instances of summer cottages constructed before zoning controls were adopted in which instances the lot is too small for a leaching field and/or the ground elevation is too near the level of the Pond to avoid direct pollution. The Board of Health, the Planning Board and the Town Officers have for a number of years followed a policy of strict enforcement of health regulations, preventing occupancy of buildings in violation, and have recommended to the Town Meeting that properties be purchased by the Town. The accelleration of this process is contemplated by the plans proposed establishing a Redevelopment Authority. It is the assumption for this area that instances of pollution of the Pond will be eliminated without a central treatment system.

There are, at times during wet periods, difficulties in septic tank operation experienced in densely developed areas in Cochituate. It is the policy of the Board of Health to solve these by improvements to the individual systems. There is no consideration of a central system.

The Water Department has in recent years, 1956-1959, completed an expansion of storage capacity to 2,500,000 gallons (new 2 million gallon tank), installed a new well at Baldwin Pond and completed the metering of individual services. The distribution system is well developed with mains to almost every part of the Town. The supply is from ground water sources, two gravel-packed wells in the Happy Hollow area and two at Baldwin Pond. The Water Department is maintained as a self supporting public service enterprise.

There are no immediate needs for capital expansion. The department is seeking by test well investigations new sources of water in the northern part of the town in order to meet the potential demand for service in this section. It seems likely that ground water sources will be able to supply the so-called ultimate population of 21,500 persons (discussed in Section 2). If not, the Town can seek supply from the Metropolitan District Commission to augment local sources. Two of the Commission's aqueducts pass through Wayland, the Hultman Pressure Aqueduct running north of Dudley Pond and the Weston Aqueduct (gravity) running through the Happy Hollow area and along Old Connecticut Path. The present policy of the Commission is to permit such connection for partial supply.

The water consumption for the past six years is as follows:

1954	233,000,000 gallons / year
1955	259,000,000
1956	257,357,800
1957	320,000,000
1958	279,000,000
1959	315,000,000

The maximum daily consumption reached was 2,360,000 gallons per day in 1957. The pumping capacity is 3 million gallons per day.

The major areas yet undeveloped (for residential use) are (1) the Rice Road area and (2) the area contiguous to Draper Road and Lincoln Road. Both of these areas will require sizeable loops to supply the new streets in future residential areas. The Town cannot require the installation of such mains by subdividers of small tracts requiring service. It seems possible that some of the costs of these loops could be assessed under the Betterment Act. In the subdivisions the Planning Board's policy is to require the developer to pay the full costs of mains and hydrants, of such capacity as is required for the subdivision itself. Main loops to these two areas are the major extensions needed in the near future.

Fire and Police Protection

The two departments operate separately except for the joint communications center in the Town Office Building. There are no new capital expenditures (except for periodic renewal of equipment) contemplated in the next few years. The new town office building houses the fire and police departments and their equipment. There is a second fire station (built within the past ten years) in Cochituate. The present policy is to allocate ten thousand dollars annually for the purchase of Fire Department equipment. Recently, changes in the operation of the Fire Department have been made by which two men are on duty each night at the Wayland Station, plus one communications officer.

Parmenter Health Center

The Parmenter Health Center on North Main Street is a privately endowed health center which is operated in close cooperation and joint sponsorship of the public health programs of the Wayland Board of Health.

The Wayland Library

The Town of Wayland has the distinction of being the first community in Massachusetts to support a free library. The Wayland Library was founded in 1848 as the result of a gift of $500.00 to the Town on the condition that the residents would raise an equal sum. The Library was first situated in the building now used by Collins' Market (the former Town House); later it was moved to the Town Hall (1879) and thence to its present building in 1900.

The present library has somewhat more than 50,000 books. The library operates a branch in the fire station in Cochituate. The expenditures for the past six years are as follows:

Year	Total Expenditures	Equipment and Capital Expenditures	Total Town Population	Per Capita Exp. (operating costs)
1954	$17,348.86	$ 383.30	6650	$2.56
1955	17,004.98	160.94	7359	2.30
1956	19,595.11	1,520.17	8000	2.25
1957	19,983.45	1,588.39	8760	2.10
1958	26,427.29	6,781.27	9301	2.12
1959	21,307.23	707.35	9785	2.12

It can be seen that the per capita costs of operating the library have declined during the past six years as a reflection of the rapid rate of population increase.

SECTION 8

Improvement of Certain Residential Areas

While in general the condition of housing in Wayland is excellent and the extent of residential blight is minimal, there are a few areas where there is housing which, if left as it is, will increasingly depreciate the surrounding areas. Through a coordinated effort to improve the condition of the buildings and to provide adequate roads, drainage, sewage disposal, these areas can be markedly improved. A program of enforcement of health regulations and of purchase by the Town of Wayland of certain properties has been in operation for several years. The proposals herein are directed toward starting a more comprehensive plan for improving all of the aspects that need attention in these neighborhoods. Federal aid is available for neighborhood improvement and conservation in certain instances. Essentially, it is a Federal inducement to local governments to undertake comprehensive programs to improve and conserve developed areas, particularly residential ones, where conditions exist that cannot improve radically by private investment alone.

For the purposes of this discussion this type of cooperative program between individual owners and the Town will be referred to as "urban renewal". The term is currently used to include a wide variety of techniques, public and private, Federal and local, designed to improve urban areas. The area deemed to be most in need of attention of this sort in Wayland is that in the vicinity of Dudley Pond. It is here that much of the Town's efforts to improve sanitation and inadequate housing standards have been made. Although it is appreciated that this area does not present a picture comparable to that of the deteriorating cores of older cities, some of the same aids and techniques can be applied. Preliminary investigation with representatives of the Urban Renewal Section of the Housing and Home Finance Agency has been made. It seems that a Federally aided program of this nature for some of the areas surrounding Dudley Pond will be possible if the Town of Wayland desires to pursue it and provided that the money from the Federal Government can be scheduled in the funds allocated at a particular time.

The Dudley Pond area was initially developed for summer use. This type of development flourished under conditions present in earlier decades, namely, that the subdivision of land was not regulated either by zoning or by the subdivision control regulations of the Planning Board. This left the builder free to divide his land into lots which were very small, in many instances too small for proper sewage disposal by septic tank much less the combination of septic tank and wells for water supply. Building code requirements were absent. These conditions led to the construction of many very small houses (mostly summer cottages) on small lots, in general, clustered in those areas which were very attractive because of their natural resources. Even in the period in which such developments were made, the conditions generated were not satisfactory. Examples of this set of conditions are not confined to the Dudley Pond area, but

occur in small quantities in scattered areas.

In the meantime the Town of Wayland has felt the pressures of population growth for two decades. It was only to be expected that these summer cottage areas would gradually be occupied on a year round basis. This more intensive use of the houses has made their inadequacies more serious.

During the last few years the Wayland Board of Health has made an outstanding effort to improve sanitary conditions and housing deficiencies where it fell within its powers. Rather than advocate a costly sewage system, the Board of Health has concentrated its efforts on removing the relatively few sources of pollution by directing (under penalty of fine) the closing of those cottages that could not properly serve for human habitation. About 70 cottages have been closed in the last five years; some have been removed. There are at least 80 more that require either improvement or removal.

The sanitary disposal of wastes is by no means the only problem in these areas. If it were, it would be a workable plan to continue the enforcement of codes by the Board of Health and the purchase of properties by the Town. In many instances the Town has purchased these cottage properties and demolished the buildings. The land vacated has been consolidated with abutting properties in cases in which there was little possibility for satisfactory sewage disposal for a new dwelling. Pollution of Dudley Pond has been significantly reduced by this program by the Town.

The scope of the deficiencies of the area selected for study at Dudley Pond includes inadequacies in streets, drainage and Utility services. The streets require new alignments involving land takings, new water lines in some cases, much in the way of surface water drainage of streets. No municipality chooses to be confronted with areas of housing where streets are inadequate, where value of housing is held low because of the incomplete development of streets, utilities, and Town facilities, and the poor condition of some of the existing housing. However, faced with the existance of such conditions in neighborhoods which otherwise could be much more desirable places in which to live, the Town Government should avail itself of every resource to make the needed improvements.

The use of betterment assessments can and is being employed (at present on a very limited basis) to make the necessary street and water improvements. A coordinated program of betterments, code enforcement and municipal expenditures can be organized under an urban renewal program through which the Federal Government can lend assistance in the form of loans for planning the program and grants to bear some of the costs.

Urban Renewal and the Federal Government

The recognition of the need for assistance to local governments in dealing with urban deterioration and improper initial development has existed for at least thirty years. Well before the first direct Federal aid for urban renewal in 1949 several States, including Massachusetts, authorized the employment of the power of eminent domain by localities for the purpose of eliminating urban blight. The Federal Housing Acts of 1949 and 1954 (and subsequent amendments) included provisions to subsidize local governments in approved plans to eliminate blight and to promote conservation. Now the Federal Government subsidizes the locality by making loans for the planning of such renewal undertakings and by grants to defray up to 2/3 of the net costs of projects in which there is an appreciable amount of clearance of blighted structures and purchase of land for new uses. In cases where the expenses for street and utility improvements make up a large part of the net costs of the project, the Federal Government is more limited in the amount of direct grant. The extent of such limitations cannot be determined until a proposal is made relative to the specific area.

In answer to a request for clarification of this point, the New York office of H.H.F.A. wrote that in the case of rehabilitation projects (as differentiated from general clearance or replating of open areas) the Federal Government was not limited in the amount of public utility costs by the same policies that determine such credits in the case of clearance projects.

To qualify for Federal aid for urban renewal, a Town must be able to demonstrate to the satisfaction of the Federal agency that it has been making every reasonable effort to control its development in such a manner that blighting and depreciating conditions are not created nor maintained. This local effort is referred to as a "workable program" by the Housing and Home Finance Agency. The Town is expected to employ all means available to it, such as building and housing codes, zoning, long range planning, subdivision control, health and sanitation rules and judicial use of public improvements.

To be specific, the "workable program" has been defined by the Federal Housing and Home Finance Agency to include the following items. Those items marked with an asterisk are within the scope of the planning studies of which this report is a part.

A Town must be able to show to the Federal Government that it has been making every reasonable effort to control its development in such a manner that

blighting and depreciating conditions are not created nor maintained. The Town is limited by its legal authorizations but is expected to employ all means available such as building codes, zoning, long range planning, subdivision control, health and sanitation rules and judicial employment of public improvements, as was mentioned above.

To be specific, the "workable program" has been defined by the Federal Housing and Home Finance Agency (through which urban renewal is administered) to include the following items. Those items marked with an asterisk are within the scope of the planning studies of which this report is a part.

1. Codes and ordinances establishing minimum standards for building construction including plumbing and electrical aspects, housing standards (space, ventilation, etc.), health and sanitation practices; also zoning by-laws, subdivision control regulations, Town standards for acceptance of streets, use of the Betterment Act.

*2. A Comprehensive Community Plan for land use, streets, community facilities and other public improvements.

*3. Neighborhood Analysis to identify the areas to be initially considered for the application of an urban renewal program.

4. An Administrative Organization such as outlined herein, i.e., a redevelopment authority.

5. Financing - A community must demonstrate that it is financially able to bear its portion of the net costs.

6. Housing of Displaced Persons - In the event of removal of any dwelling units, the local authority must have a plan to find housing for such families. (There would be very little displacement in a program in Wayland.)

7. Citizen Participation - A community is required to organize community-wide participation by individuals and organizations in order to get the local support that such a program as this needs if it is to succeed.

It seems evident that with little additional effort the Town of Wayland could qualify as having a satisfactory "workable program" and thereby apply for

Federal aid. With the establishment of a Redevelopment Authority, items 4, 5, and 6 can be satisfied. It is obviously necessary to familiarize the Town officials and townspeople with the advantages of this method of neighborhood improvement. Citizen participation will be vital to the success of any renewal project.

The Local Contribution

There are three ways in which Wayland would contribute to any urban renewal project. First, the Town votes to authorize a redevelopment authority. The local Redevelopment Authority is created by vote of Town Meeting at a regular or special session. The Authority is composed of five members, four who are elected at Town Meeting and a fifth who is appointed by the State Housing Board. Among the powers of the Authority are the right to acquire and dispose of property, employ the power of eminent domain to carry out any plan adopted by Town Meeting and approved by the Planning Board and the State Housing Board, and borrow and accept grants from the Federal Government and other sources. The Authority can receive funds appropriated at a Town Meeting for general operation. The State limits the amount of these appropriations to a fixed proportion of the Town's assessed valuation. In Wayland the Authority with approval by Town Meeting may receive $7,500 annually for defraying initial costs and the annual administrative expenses.

Second, the Town approves of each specific project through their approval of a local contribution to the project, after approval of the Planning Board, the State Housing Board, and the Federal Housing and Home Finance Agency. The local contribution can be in many forms. The Town can receive credit for that part of the cost of new streets, utilities, schools, parks, etc., directly benefiting the renewal area. In all cases, the local contribution must be at least one-third of the net project cost.

Third, the Town continually aids the urban renewal project through programs of local participation, particularly to organize private property owners to repair and improve their own properties.

Suggested Renewal Areas

The most urgent renewal area in Wayland is at Dudley Pond. The area is basically a great asset to Wayland and the Metropolitan Boston area. The Pond itself is maintained and stocked by the Commonwealth under the Great Ponds Act.

Across the north of the Pond runs a Metropolitan District Commission aqueduct. To the west of the Pond, 800 feet away, is Lake Cochituate, a State owned lake and park. Dudley Pond is part of a network of open land and recreational facilities planned to be included by the Department of Natural Resources in the Bay Circuit proposals for a greenbelt around Boston. The area is entirely residential in use and character with the exception of a few retail trade enterprises (see land use plan - number 3). It is expected that this area will continue in residential use. The land is attractive, convenient to Boston, and served by a new elementary school. There has been a great deal of new residential construction in the area. Only in the area adjacent to the Pond is there need for renewal. In that area, developed originally as a summer colony, many houses are former summer cottages which need a great deal of renovation to make them adequate for year-round use. The roads are narrow and without wearing surface, a condition while adequate for summer use makes them impassable at times for year-round use. Because of the poor quality of the roads, even fire trucks cannot always get through. The size of many of the lots around the Pond is too small to provide privacy and healthy conditions. The Wayland Health Department has done an excellent job of closing those buildings which were directly polluting the Pond, but there is still a great deal more to be done before the Pond will be free from all pollution. In addition to closing the dwellings which are now polluting the Pond it will be necessary to consolidate lots as much as possible to insure that there be no sewage runoff into the Pond in the future. From preliminary field work in the area involving the recording of housing quality, land use, road conditions and road widths, the following observations have been made by area:

The area around Dudley Pond is being considered as a single planning unit, although for the purposes of the following discussion the area has been divided into four sections.

Section 1: Section 1 contains about 40 acres. There are 96 dwellings (single family) and 2 semi-residential units (retail with dwellings above). While some of these houses were built for year-round use, many were not. There are at least 15 houses in poor condition after a long period of year-round use without adequate conversion. The roads are in poor repair or unpaved. There is Town water in the area but no provision for storm drainage. The lots fronting on Dudley Pond are the ones which are, on the whole, poorly maintained and lacking adequate septic tanks. These housing units are contributing to the pollution of the Pond.

In addition to the area of developed housing used year round, whether adequate or not, there is a section of about 10 vacant acres in one block, immediately behind the houses lining the Pond. While this area of 10 acres is in a single block, it is owned by 38 different parties not including 2.3 acres of the same block owned by the Town of Wayland in 9 parcels. Almost every

lot is below the zoning requirements of 120 foot frontage and 20,000 square feet. While the land is gently rolling, dry and well suited to residential development, it remains vacant while adjacent to the study area there is a new subdivision of 20 houses on steeper terrain completed and sold within the last year. Part of the renewal program will be to assemble the land into single ownership to be subdivided for residential use.

Section 2: Section 2 is very similar to the undeveloped area of Section 1. The total area is about 26 acres. There are 14 houses, all but two of which are in good repair. In addition, there are 17 parcels (6 acres) in separate private ownership and 9 parcels (about 2 acres) owned by the Town of Wayland. None of the lots conform to the zoning which requires 120 foot frontage, and 20,000 square feet of area. Since almost all of the houses are new and now in excellent condition, the area can best be protected from deterioration by resubdivision and provision of adequate roads and water.

Section 3: Section 3 has two sorts of housing: summer camps of considerable age now being used on a year-round basis, and sturdy structures approximately 30 years old well suited to year-round use. The total area is 25 acres containing 70 houses. Of these, 12 houses are in poor condition used on a year-round basis although originally constructed as summer cottages. Improvement in the roads and removal of some of the poorest of the cottages is vital to maintain the area.

Section 4: Section 4 is the largest and most densely developed of the four sections. There are 193 dwellings on 80 acres of land. (Of the 80 acres, at least 11 are vacant and/or swampy; another 5 too steep for development.) Of the 193 units at least 84 are in poor condition. While there is now a certain amount of private rehabilitation going on in the area, this work is a small part of what needs to be done. Until the Board of Health, or some other agency, has completed its program of closing the worst of the cottages, there will continue to be pollution of Dudley Pond. The roads are very poor on the whole. Some are almost impassable to fire equipment. Some roads must be straightened and widened, some abandoned; all remaining roads should be paved and adequately drained.

The amount of work necessary to improve the Dudley Pond area will be costly. While the Town is doing a great deal already and is continuing to do so, the costs of completing the whole project are far greater than the resources of the Town. It is for this reason that the Dudley Pond area is recommended as a site for a Federally aided urban renewal project.

There is one additional area for urban renewal in Wayland and that is directly opposite the Dudley Pond area and includes Ravine Road and Wallace Road. It is very possible that that area can be renewed through the efforts of the Town and the private owners without Federal aid since the size of the task is not great.

Section 9

Land Use in the Future

The use of land in Wayland for future years has been charted by past and present planning policies, primarily effectuated by zoning and subdivision control. Since 1934 zoning requirements have indicated a desire to maintain Wayland as a low density residential community. As population pressure has heightened, the Planning Board and the Town Meetings have reappraised Wayland's position within the western section of the metropolitan area and have increased the lot area and frontage requirements for residential districts and maintained the single family residence requirement. These policies are primarily responsible for the growth of Wayland in a manner that has encouraged investment in homes and gives evidence of creating a most satisfactory environment for family living. The continuation of the present policies seems entirely appropriate; there is no evidence that growth has been unduly discouraged or that unjustified hardship has been felt by individuals under these policies. On the contrary, the public policy has fostered growth in non-residential land use even though such development has created problems of traffic and other frictions between residential and non-residential uses.

The maps that accompany this General Plan show the density of development and the location of non-residential uses. The older areas in Cochituate are the most dense, these having been developed before zoning and subdivision control were employed. Most of the older residential areas in other parts of the Town have an open, semi-rural character which is in keeping with present space standards. The newer areas have followed zoning minimums to a large extent, although there are many residential properties with more than minimum lot areas (and without the possibility of further subdivision on an economically feasible basis). The large amounts of steep wooded land and swampy marsh area tend to encourage the maintenance of open spaces because the cost of subdividing and building on such land is too great to be justified at the present. This is not to say that this will always be the case, for which reason the program of open land acquisition by the Town and the Sudbury Valley Trustees is of such immediate importance.

Plan number 8, attached herewith, illustrates the proposed use of land. It is a compilation of the specialized plans discussed and submitted in the various sections of the General Plan. No major changes in residential densities (and consequently zoning) are proposed at the present time. As discussed in Section 10 some increase in residential densities may be desirable after careful consideration and effective controls to insure that the open character of Wayland is not sacrificed.

Wayland Center

In 1956 and 1957 consideration was given to the zoning of land for retail business and to changes in the zoning bylaw provisions relating to business. (1)

---

(1) Proposals For Changes In Zoning By-Laws, 1956, prepared by James L. Harris, distributed to citizens of Wayland by the Planning Board.

LAND USE INVENTORY
WAYLAND MASSACHUSETTS

LAND USE INVENTORY KEY

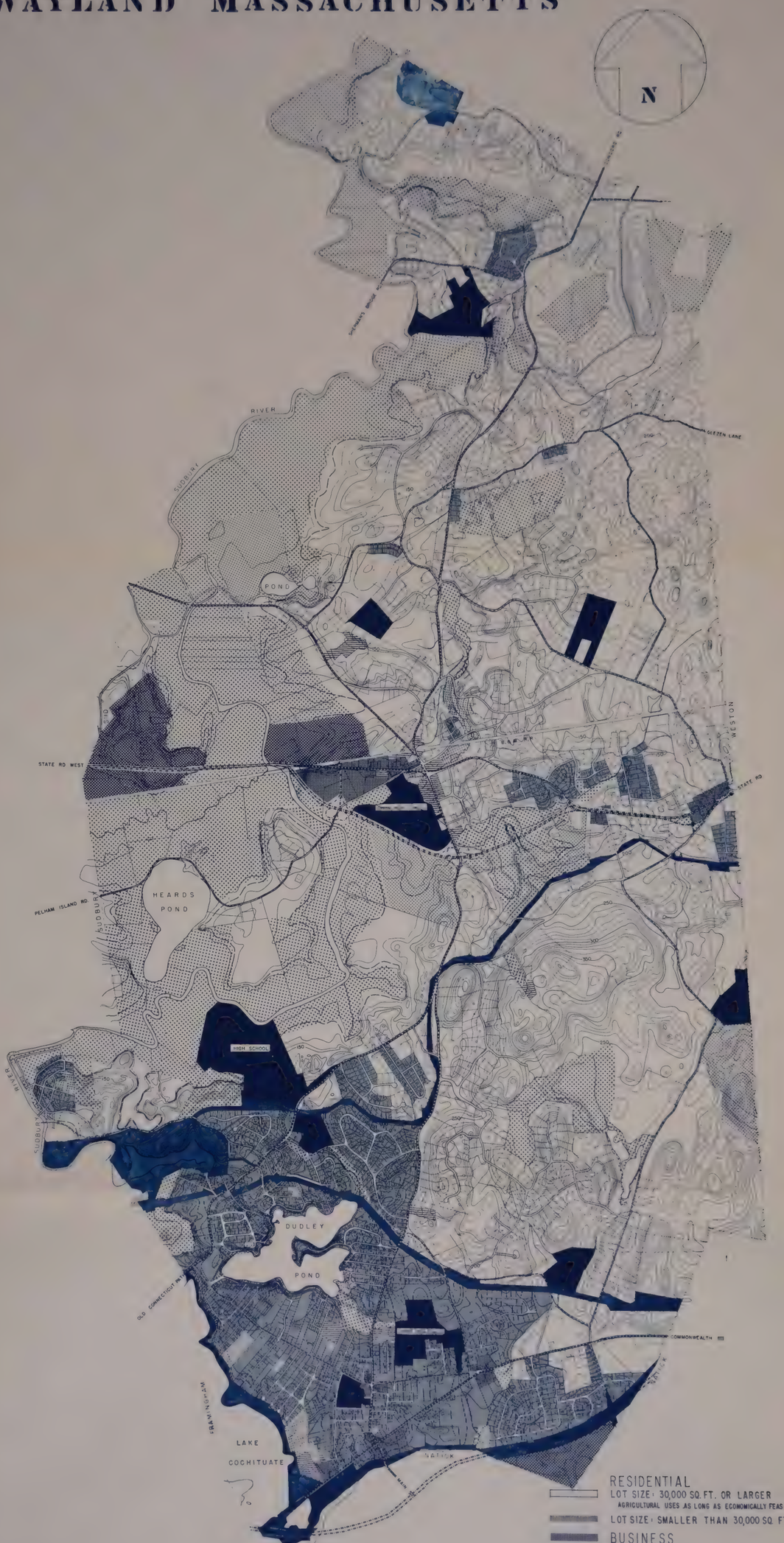
- VACANT — AQUEDUCTS
- AGRICULTURAL
- PUBLIC & SEMI-PUBLIC
- SCHOOLS — EXISTING BUILDINGS
- RESIDENTIAL
- BUSINESS
- INDUSTRIAL

0 500 1000 2000 3000 4000 5000
SCALE IN FEET

3

PREPARED FOR THE WAYLAND PLANNING BOARD WAYLAND MASSACHUSETTS
BY JAMES L. HARRIS - ARCHITECT & PLANNING CONSULTANT - CAMBRIDGE. MASSACHUSETTS 1959

PROPOSED LAND USE
WAYLAND MASSACHUSETTS



8

PREPARED FOR THE WAYLAND PLANNING BOARD, WAYLAND MASSACHUSETTS
BY JAMES L. HARRIS, ARCHITECT & PLANNING CONSULTANT, CAMBRIDGE, MASSACHUSETTS 1959

A land use plan for both Cochituate and Wayland Center was developed on the basis of which zoning changes were proposed and adopted with only minor modifications. At that time a part of the triangle between Pelham Island Road, State Road West and the Sudbury River was placed in the Business B District. It is proposed that as the demand develops, the remainder of this triangle be zoned for business (requiring off street parking as is provided in the requirements for the Business B District). In order to preserve the character of Wayland Center, it is urged that efforts be made to avoid the replacement of the frame buildings facing Cochituate Road now in the Business District A. These buildings are harmonious in character with the residential buildings making up the center of the Town. The land area of these parcels is too small to provide off street parking in significant amounts. It is hoped that a financially satisfactory use of these properties can be found without demolishing the present buildings. The most obvious suggestions are use for professional or business offices or for apartments (either as non-conforming uses or with a zoning variance). Related to the preservation of the character of Wayland Center is the disposition of the three parcels in Business District A on the south side of the intersection of Pelham Island Road and State Road West. It is recommended that these be acquired by the Town and that the buildings be moved or razed. This would enhance the school site and the general appearance of the Town Center. It would also avoid the ultimate development of traffic generating activity (retail business or similar commercial activity) at a point of extreme congestion.

No further light industrial use is proposed in the Wayland Center area other than as outlined below. The western part of the triangle recommended for business could be used for light industry if it were clear that such land would not be needed for expansion of the business district in future years. The case may well be that the present retail development, with modest expansion, will be all that can be supported for retail trade because of competition in Weston and Sudbury. In this case the western part of this triangle could be used for light industry without infringement upon residential areas or causing difficulties to the retail development adjacent. The proposed bypass for Route 20 will, if constructed, pass adjacent to this area and will require an interchange provision of some sort to handle the traffic from the Raytheon Manufacturing Company, the retail center and the Sand Hill development. These factors combine to make this a very desirable location for light industry if the soil bearing conditions are not such as to discourage construction.

The development of a plan, jointly worked out by Wayland and Sudbury, for the Sand Hill area as an industrial sector is included in these recommendations. The design and construction of the Route 20 Bypass (see Section 6) will affect the details of a plan for the Sand Hill area. The fundamental objectives are:

(1) to control the ground level for proper surface water drainage and ease of development of the district in accordance with a coordinated plan.

(2) to make a limited number of connections to Route 20 so that traffic can be handled in a manner that will not interrupt the movement of traffic on State Road West. (See Section 6 for further discussion of this).

Another very important series of land use policies relate to the preservation of open land and the protection of marshes and the flood plain. The relatively low density residential zoning requirements in most areas will preserve enough space around dwellings to permit the maintenance and development of trees, shrubs, etc. which will enhance the desirability of the residential areas. At the same time some larger open areas are needed for recreation and the enjoyment of undeveloped land, either wooded or open. In 1958 the Town Meeting enacted flood plain zoning to exercise some controls over the filling of the Sudbury River marshes. In Section 5 and on Plan Number 7 detailed proposals are made for public and private acquisition of steep land, marshes and flood plain areas. Coupled with this is the proposal for a series of connecting paths and trails to be established by purchase or easement. To supplement these efforts, the Town can maintain the trees and rights of ways of streets in a manner that increases land values. There are many beautiful streets in Wayland. Conscious efforts to retain these assets should be made. Plain Road and Old Connecticut Path are two examples of such streets warranting special care and preservation. One of the important proposals of Section 6 is that no major widening of Old Connecticut Path be done in the section from Route 20 to Cochituate Road. This recommendation is made in light of the fact that the Route 20 Bypass can be planned in a manner to accomodate the traffic seeking to use this part of Old Connecticut Path.

In the Cochituate area no expansion of the business districts is recommended. It does not seen desirable to foster business uses along Commonwealth Road east of Main Street to any extent beyond the areas zoned at present for business use. The one exception to this is the area between The Massachusetts Turnpike and Commonwealth Road, east of Oak Street. This area has location characteristics that are desired by light industry, i.e., visibility from main highways, good access and satisfactory terrain for buildings. It seems possible to develop this area for industry (with a buffer along Oak Street) without depreciating adjacent areas for residential use. The other possibility for light industry is a portion of the area south of the Turnpike. The decision relative to land use here should be fully coordinated with proposed and actual land use and access in the Town of Natick in light of the fact that the area is entirely isolated from the remainder of Wayland by the Massachusetts Turnpike. There is an area nearby in Natick now developing for industry. Current contact with the Town of Natick indicates that no policy has been determined relative to expanding this industrial district. At present all land surrounding the Wayland sector south of the Turnpike is in a residential zoning district.

Section 10

Zoning and Subdivision Control

Zoning was originally adopted by vote of the Town Meeting on September 5, 1934. This represented a comparatively early awareness of the protection afforded by zoning. It has meant that there has been a measure of control exercised over the subdivision and development of land for residential purposes and that non-residential uses have been restricted to certain well defined areas. In the period previous to 1934, Wayland did experience some subdivision of land into very small parcels in the area around Dudley Pond and in certain other areas in the vicinity of Cochituate. Fortunately, the remaining portions of the Town have been subdivided for the most part according to standards which even today are acceptable. A number of changes are herein recommended in order to carry out the specific changes in land use that are recommended in this report. Revisions in by-law wording and certain consolidation of district categories are also proposed.

BY-LAW CHANGES

The text of the zoning by-law has been modified numerous time since its original enactment. The most recent major changes occurred in 1951, 1953, and 1956. In the first two of these instances the lot sizes were increased in keeping with standards deemed appropriate by the Town Meeting. Lot sizes were increased from 10,000 sq. ft., 15,000 sq. ft., and 20,000 sq. ft., (in 1951) to the sizes currently in force namely: 20,000 sq. ft., 30,000 sq. ft , 40,000 sq. ft., and 60,000 sq. ft. The changes in 1956 involved the creation of two business districts, taking recognition of present standards for retail space requirements. Sizeable increases in business district areas have been accomplished, both then and subsequently.

Relative to lot sizes this report maintains that the present regulations are adequate and appropriate for the immediate future. It has been pointed out earlier that the long range prospect for Wayland may include population pressure which will justify re-appraising the density standards established by the present by-law. This is particularly likely as a means of accommodating certain segments of the population desiring forms of multiple dwellings such as apartments, row houses and variations thereof. It is possible that apartments can be introduced on open sites without necessitating densities above four or five families per acre. This is further discussed herein.

The major changes proposed in the by-law involve the following:

1. A reorganization of the provisions in such a manner as to list in one section all of the use regulations governing the various districts. It is proposed that all

area and dimensional requirements be tabulated in chart form, with additional explanation, making up a separate section. General provisions are placed in two sections and deal with non-conforming uses, off-street parking requirements for all districts and other matters of general application. The functions and responsibilities of the Board of Appeals have been explained in much greater detail. Criteria have been outlined relative to certain special permits. These criteria deal primarily with earth removal, site plan approval and the conversion of single family houses to two family houses.

2. It is recommended that the Roadside Business District and the Light Manufacturing District be eliminated in light of the fact that each of them is similar to other districts currently established and that the size of each district is very small. In the case of the Light Manufacturing District, the only area in this category is that adjacent to the Boston and Maine Railroad line in the vicinity of Wayland Center. Business areas along the north side of State Road West can and should be expanded to include the narrow strip now designated as Light Manufacturing District. The Roadside Business District occurs on State Road East in two locations opposite each other. It is proposed that the area on the south of State Road East be placed in Business District B and that the area on the north side be returned to a residential district.

3. The Limited Commercial District has been retained as the only industrial district. This now includes the area used by the Raytheon Manufacturing Company. It is proposed that a sizeable area adjacent to the Town of Sudbury on both sides of State Road West be zoned for this use. The wording as proposed herein maintains the same degree of control that currently exists for industrial development and is flexible enough to accommodate any like applicants. It is proposed that the Board of Appeals have the power to permit certain light industrial operations in Business District B.

4. The provisions of the flood plain district have been incorporated in the text and strengthened by prohibiting filling of the flood plain district in instances in which the ground level prior to filling is at or below the elevation 120 ft. above mean sea level. This is proposed in order to control the filling of that portion of the flood plain that is annually inundated.

5. It is proposed to try to clarify the status of the various parcels of land which have become non-conforming as to area, frontage or other dimensions as these standards have gradually been raised. The present by-law specifically provides that parcels that did conform to the by-law prior to June 20, 1951 maintain their eligibility for building permits even though they do not comply with current provisions. These exemptions have been preserved in the present draft. In addition

recognition has been taken of the exemption granted by Section 5A of the Zoning Enabling Act. In essence this provides that permits for residential use must be granted to owners of parcels of land that contain at least 5,000 sq. ft. of area and have at least 50 ft. of frontage, provided that at the time such parcels became non-conforming they were held in ownership separate from that of the adjacent land.

However, it is proposed that parcels which neither conform to present regulations nor qualify under one of these exemptions, cannot be built upon without a variance. The present by-law gives or intends to give the Board of Appeals the right to authorize the use of certain irregularly shaped or sized parcels as special exceptions rather than as variances. This change would mean that any non-conforming parcels not otherwise exempt would have to employ the relief provided by variance. This appears to be reasonable and in line with the intent of the Zoning Enabling Act.

There is an additional category of parcels that is now treated separately. It involves the instances in which an existing parcel does not have frontage on any way that qualifies under the Subdivision Control Law. As a means of making this matter more precise a "definition of frontage" has been included in the by-law by which frontage is tied specifically to the fact of abutting upon a way which conforms to the legal definition provided for determining whether or not a division of land constitutes a subdivision under the Subdivision Control Law. This is at present as follows: frontage has to be upon one of the following: a public way, a way approved by the local planning board in accordance with the Subdivision Control Law procedures or a way in existence when the Subdivision Control Law became effective in a particular town, having, in the opinion of the planning board sufficient width, suitable grades and adequate construction to provide for the needs for vehicular traffic in relation to the proposed use of the land abutting thereon. Undoubtedly they may have clearly established rights of way across property of other owners in order to grant functional access. In the present by-law, wording exists which appears to mean that such parcels may be built upon only in instances in which the area requirements of the present by-law are met. This intent has been preserved in the present draft in requiring that parcels without frontage as defined may not be built upon unless they contained at least the area required in the particular district at the time the permit is sought. It can be pointed out that this may produce hardship upon certain owners. This is the case; however, the procedure of securing relief by variance is open in such instances. This is in accord with the intent of the variance. This control as presently exists and proposed for retension will give the Board of Appeals the opportunity to evaluate the circumstances under which a permit is sought. The

exemption granted in Section 5A of the Zoning Enabling Act is specific in defining that such exemption is provided for lots containing areas of more than 5,000 sq. ft. and frontage of 50 feet or more. It seems evident that the intent of this exemption is not directed toward parcels without frontage.

6. In general, the use provisions of the various districts have not been appreciably changed. For Residence Districts, there has been a slight tightening for requirements for "home occupations". The requirement of site plan approval for certain non-residential uses and a clearer definition of accessory uses have been added. Permission as a special exemption is maintained to convert dwellings to two family use provided the house existed when the by-law was first adopted. As a special exemption, the Board of Appeals is authorized to permit the installation of utilities and the construction of driveways granting access to non-residential uses in adjacent districts. This has caused a controversy in many communities. It seems desirable to clarify the matter by permitting such and granting the community a degree of control. The requirements for permission to remove earth have been greatly expanded in keeping the the recommendations of The National Sand and Gravel Association.*

For the two business districts, very few changes have been proposed. The primary modifications involve the broadening of the scope of special permits by the Board of Appeals to include light manufacturing, research and development, and hotels and tourist accommodations.

In Limited Commercial Districts, the use provisions have not been modified. The paragraph dealing with the quality of construction has been retained although logically this belongs in the building code rather than in the zoning by-law and should be so shifted. New residential uses are prohibited in the Limited Commercial Districts in this proposal. In the present by-law, residential uses are not permitted in either of the business districts, i.e., Business District A and Business District B. This has been retained.

Lot area and dimension requirements have not been changed except that, for business districts and the Limited Commercial District, minimum lot areas and frontages are proposed that are very modest, thereby allowing a certain control over the subdivision of parcels in these districts. The side and rear yard requirements of the Limited Commercial District have been reduced from 100 feet to 60 feet; a 10 foot buffer strip has been added to the requirements in the Limited Commercial Districts in instances where the parcel abutts a resi-

---

*Ahearn, Vincent P., Jr., The Zoning Problem and its Significance to the Sand and Gravel Producer, National Sand and Gravel Association, Washington, D. C. 1958.

dential district. The height limit in the business districts and the Limited Commercial District has been eliminated.

7. An expansion of the requirements for off-street parking has been introduced to apply to all districts based upon the use of the particular parcels of land. Design standards for these parking spaces have been recommended. A requirement for off-street loading facilities is proposed to apply to all districts depending upon the use of the particular parcel.

8. Trailers have been specifically excluded. This is in conformity with the present practice in the community and consistent with the character of the present development.

9. It is proposed that a requirement for a certificate of occupancy be made giving the building inspector the opportunity to check adherence to zoning and building requirements prior to actual occupancy. This can be administered concurrently with the controls imposed by the Building Code.

10. Criteria are presented to guide the Board of Appeals in approving site plans for certain uses other than single family residences. These instances are specified provisions in the text. These are reasonably similar to those currently in force in the present by-law. The State Supreme Court has indicated that the requirement for site plan approval prior to issuance of building permits constitutes a provision for special exception and consequently should be administered by the same body, i.e., the Board of Appeals, in accordance with the provisions applying to special exceptions. In light of this, the specific instructions to the Board of Appeals, relative to time of approval of site plans, have been omitted.

Also included in the section dealing with the Board of Appeals are certain criteria for other special exceptions and most important of these is that permitting earth removal. It is proposed to prohibit entirely the removal of sod or loam except as incidental to construction projects. Procedures are set up for applying for any earth removal permit and the Board of Appeals is charged with responsibility to insure that measures for land rehabilitation are required and that nuisance factors and safety hazards are minimized.

11. Discussion of granting permission to erect multiple family dwellings:

In the past few decades the rate of suburban growth in most metropolitan areas has accelerated, producing the conditions of rapid growth and need for expanded facilities now experienced in such communities as Wayland. The Federal aids to mortgage financing, development practices and zoning requirements have given almost exclusive emphasis to the single family house as a dwelling type in outlying areas. In some of the larger suburban communities, zoning has recognized the need for and the validity of various types of multiple dwelling types. This is particularly true in communities in which some apartments existed prior to the adoption of zoning. In the small communities that have experienced most of their growth in the last fifteen years and in which there was no precedent for multiple dwelling types, zoning has provided predominantly for single family houses and, in some instances, for two family houses disposed on lots in a similar pattern to that of the single family house.

The composition of the population in any community comparable to Wayland is such as to include persons and families whose housing needs can best be met by apartments or row houses, offered for rent. The preference for residence in a particular town should not necessitate occupancy of a single family house. There is a reason to believe that as the Town of Wayland continues its growth, the number of individuals desiring rental accommodation in a dwelling type other than the single family home will increase.

To provide for these needs, consideration is suggested of possible means of permitting multiple family dwellings. There are at least two markedly different approaches to multiple dwelling construction in areas similar to Wayland. The first is the erection of small walk-up apartments or groups of row houses, located in what are now the denser areas of any community. This type of development could vary in size from a few dwelling units to buildings that housed fifteen or twenty dwellings on sites that are within existing single family areas. The other approach is one that is not yet in great evidence in the Boston Metropolitan area. It involves sizeable apartment developments on large vacant or little used tracts, planned to preserve some of the aesthetic advantages of the natural landscape.

It has been one of the ideas of professional planners and others that flexibility in zoning should be provided to permit a variety of patterns of living to residents. There is increasing evidence that the local housing market would support rental housing in areas as distant from the center of the metropolis as Wayland; this is reinforced by the constant growth of employment opportunities in the suburban periphery.

From the point of view of preserving the open character of the community, it would be necessary to limit the density for both large and small apartment developments and to exercise close control over site plans. If the zoning by-law specified density standards, off-street parking and requirement for site planning approval, it seems reasonable that this deviation from the single family dwelling pattern can be permitted without damaging the cherished character of the Town. The following principles are suggested as suitable to accomplish this type of zoning permission:

a. Erection of multiple family dwellings permitted as a special exception by the Board of Appeals, with approval of site plan required.

b. Density limits ranging from four families per acre of lot area for small developments employing two or three story buildings (apartments and row houses) to ten families per acre on sites of six acres or larger. A slight increase in density might be made applicable by the provision of garage space within the building thereby reducing the amount of ground area covered by building and paving.

c. Generous height limits, e.g., 130 feet to permit high buildings; adherence to coverage and yard requirements as specified.

d. Controls and provisions for the construction of adequate streets for access in cases where the Subdivision Control Law does not apply, to insure against the subsequent selling of part of a development to individual purchasers (other than through a cooperative organization).

To establish the areas in which such developments could be permitted, a separate district might be established in which the requirements for multi-family dwellings would apply in addition to those already in force under the provisions of the single residence district. In this sense the multi-family district would be similar to the Flood Plain District in the applicability of its provisions. As an alternative procedure the multi-family permission might be granted in any of the four residence districts, leaving the determination solely to the Board of Appeals after a public hearing. One advantate of the establishment of a separate district would be that the decision to grant this power to the Board of Appeals would be made by the Town Meeting in each case. This would mean that a property owner seeking such permission, if his property were not in the multi-family district, would have to present the matter to the Town Meeting for specific consideration. Either of the two methods seems workable. Precedent in Wayland seems to favor the designation of a specific district and the consideration of each district change by the Town Meeting.

The following was not included in text of the bylaw because of the desire for further consideration by the Planning Board.

Proposed as an insert in Section IV, paragraph F

F. Multiple Dwelling Residence District

1. The purpose of this district is to establish areas within the Town of Wayland in which multiple family dwellings may be erected. The land included in this district is also included in one of the other residence districts as defined in this by-law. It is the intention of these regulations that the requirements of this district be considered to apply in addition to those of whatever other district may include the particular property.

2. Under the following conditions multiple family dwelling structures, either as single buildings or groups of buildings, may be permitted as a special exception by the Board of Appeals. These structures may include any or all of the following dwelling types; single houses, two family and duplex dwellings, row houses and apartments. All dwellings constructed on one lot shall be in one ownership, except that forms of cooperative ownership by building occupants may be permitted. If groups of dwellings are to be subdivided and/or parts thereof held in separate ownerships, the requirements made by the Town of Wayland under the Subdivision Control Law and those of this by-law applicable to uses in the particular district shall be met.

3. In instances in which two or more dwelling units are proposed for any one lot, the Board of Appeals shall require the submission of a site plan for approval. Such applications for special permits shall include plans of driveway location and specifications thereof. The Board of Appeals shall seek the recommendation of the Planning Board relative to the adequacy of layout and specifications of the driveway establishing access to the various dwellings. Any site plan approval issued by the Board of Appeals shall in no way constitute approval of a new way as required for the subdivision of land under the regulations of the Planning Board as authorized under the Subdivision Control Law.

4. In deciding a request for special permit, the Board of Appeals shall consider the extent, if any, to which such proposed multiple family development will depreciate the single family dwellings in the immediate vicinity. If the permit request is granted, the Board may make reasonable requirements to minimize such influences. The area, frontage, yard and height requirements of Section V shall be met; as well as the off-street parking requirements of Section VI. The density (number of families per acre of lot area) shall be limited to four families per acre unless the percent of coverage of lot by buildings is reduced in accordance with the

following table, in which instances higher densities may be permitted as indicated herein:

% of coverage of lot by buildings	minimum lot area	density families/acre
8%	2 acres	5
6%	3.5 acres	6.5
5%	5 acres	8
4.5%	6 acres	10.

In cases where the off street parking required is included with enclosed buildings attached to or included in the building structures used for residential use, the densities in the above schedule may be increased by 10% of the number of such parking spaces included in said buildings.

Proposed as an amendment to Section V, paragraph A.

Insert the following:

Multiple Dwelling Residence District:

> Minimum lot and yard dimensions of the particular single Residence District Shall apply. The minimum percent of coverage of lot by buildings shall be 15%. Height limitation shall be 130 feet. Yard dimensions (front, side or rear) shall be such that the minimum distance from any building (regardless of whether or not it is the nearest to the property line) to a property line shall be at least twice the height of the building. This requirement is in addition to the minimum yard dimensions established above.

MAP CHANGES

In addition to the map changes discussed above involving the elimination of the Roadside Business District and the Light Manufacturing District, there are several other changes proposed. At the intersection of Old Connecticut Path and State Road East, it is proposed to recognize the existing business uses but not to foster any expansion. No change is proposed relative to the property south and east of the intersection State Road East and Old Connecticut Path; it is now in a residential district.

It is contemplated that ultimately all of the area between Pelham Island Road and State Road West, east of the Sudbury River, should become incorporated in Business District B which now covers only a part of this area.

It is also proposed that an area in the vicinity of Route 20 and west of the Sudbury River be zoned for industrial purposes after a development plan has been agreed upon by the planning boards of the towns of Wayland and Sudbury. A large part of this area, known as Sand Hill, is in Sudbury. The plan is dependent upon decisions relating to the Route 20 bypass and its connections to existing and new streets.

Several changes in Residence District boundaries are proposed in order to simplify the map and to take recognition of the topography of certain areas. Almost all of the Flood Plain District is proposed for the Residence District requiring a lot area of 60,000 sq. ft.

REGULATION GOVERNING THE SUBDIVISION OF LAND

Chapter 41 of the General Laws of Massachusetts authorizes towns to adopt the section thereof called the Subdivision Control Law (Sections 81K through 81GG). These sections empower the local planning board to adopt regulations governing the subdivision of land. The statute spells out in detail the limits of the requirements, giving direct responsibility to the board of health and establishing maximum periods for consideration of plans. The law leaves the local planning board with the decision as to what shall be the construction specifications of the roadway, drainage lines, etc. The town is free to determine through its planning board, the extent to which the developer of land shall pay the costs of development. In general, the practice in most of the Boston Metropolitan suburbs is to require the developer to pay the full costs of the road construction, utilities and engineering services. The Wayland Planning Board follows this policy. The changes recommended in the present regulations of the Planning Board include a higher standard of road surfacing and the provision of sidewalks and curbs where needed at the option of the Board. Forms have been prepared to facilitate the various steps and procedures in administering the Subdivision Control Law by the Board.

Section 11 Capital Expenditure Program and Its Budget

The major capital expenditures made in the past decade have been financed by a combination of borrowing by the issuance of bonds, use of accumulated funds in the Excess and Deficiency account and by direct appropriation from current tax revenues. A list of the major capital expenditures exclusive of water supply and distribution facilities made since 1952 are:

	borrowings	E & D and current revenues
Addition to Cochituate School	220,000	
Fire Station (Cochituate)	60,000	
Happy Hollow School	600,000	
Loker School	725,000	
Claypit School	725,000	
New town office building, fire and police		
New High School	2,275,000	

For the next six years a capital budget has been proposed (in Table 11-B) in order to show the increase in direct taxes that may be attributable to capital expenditures and how it may be evenly distributed throughout the period 1961-1966.

The proposed capital expenditures in this projection do not include highway construction, vehicles and equipment, water extensions or betterments beyond a "straight line" projection of these items for the past six years. The major new capital expenditures in the projection are as follows:

	Costs	date of borrowing	item
school buildings:	$580,000	1961	additional elementary school capacity for 240 pupils (building additions)
	$800,000	1964	additional elementary school capacity for 420 pupils
	$800,000	1966	additional elementary school capacity for 420 pupils
	$800,000	1968-'72	expansion of the high school capacity by 350 pupils
land purchases and urban renewal	$500,000	10 year period	one school site easements or fee of land for recreation, forest and conservation purposes town's share of urban renewal costs in Dudley Pond area

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	32,639.54	33,169.04	25,915.98	24,324.07	30,345.87	33,136.00	37,400.00	37,600.00	37,800.00	38,000.00	38,200.00	38,400.00
[illegible]	90,134.66	95,844.28	79,204.73	116,907.93	99,999.41	211,955.29	100,000.00	110,000.00	110,000.00	110,000.00	110,000.00	110,000.00
[illegible]	38,373.94	48,356.24	54,885.90	58,695.13	72,199.38	76,853.52	89,000.00	97,400.00	105,800.00	114,200.00	122,600.00	131,000.00
[illegible]	639.77	1,521.49	2,325.66	2,439.97	1,606.40	6,049.82	1,700.00	1,700.00	1,700.00	1,700.00	1,700.00	1,700.00
[illegible]	[illegible] (a)	[illegible] (a)	[illegible] (a)	[illegible] (a)	[illegible] (a)	[illegible] (a)	244,311.00 (a)	253,066.00 (a)	261,758.00 (a)	270,433.00 (a)	279,135.00 (a)	287,855.00 (a)
[illegible]	68,752.75	118,035.46 (e)	163,737.10 (e)	107,681.03 (e)	83,896.45	96,890.39	91,470.00	95,260.00	99,050.00	102,840.00	106,630.00	110,420.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	49,794.85 (b)	150,000.00 (b)	100,000.00 (b)	199,417.62 (b)	473,430.27						
[illegible]	600,000.00 (c)	15,000.00 (c)	1,500,000.00 (c)		150,000.00 (c)	1,175,000.00	1,100,000.00					
[illegible]	6,833.27		8,986.61	15,198.98	2,475.20	12,483.97	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	3,874.30 (d)	2,149.60	6,132.48	954.06	7,916.44 (k)	3,090.36	2,950.00	2,950.00	2,950.00	2,950.00	2,950.00	2,950.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Totals	[illegible]	[illegible]	[illegible]	2,092,764.56	2,687,794.66	4,055,299.15	3,832,708.00	3,125,768.25	[illegible]	[illegible]	[illegible]	4,424,896.75
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] (f)	[illegible] (f)	[illegible] (f)	[illegible] (f)	992,367.38	2,180,795.67(f)	2,357,640.00 (f)	1,469,630.00	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] (g)(j)	[illegible] (g)(j)	[illegible] (g)(j)	686,877.69 (g)(j)	1,083,769.63 (g)(j)	868,125.12(g)	937,240.00	1,019,846.00	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible] (h)	[illegible] (h)	338,441.14 (h)	436,027.31 (h)	746,060.77(h)	357,678.00	424,929.25	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	25,952.61	31,511.32	35,011.08	38,657.62	42,913.07	44,746.82	51,380.00	55,620.00	59,860.00	64,100.00	68,340.00	72,580.00
[illegible]	77,617.76	85,315.96	121,627.86	126,995.25	105,546.99	13,674.76	119,510.00	126,490.00	133,470.00	140,450.00	147,430.00	154,410.00
[illegible]	4,645.32	9,949.88	10,008.00	10,090.13	10,794.36	12,723.72	9,260.00	9,260.00	9,260.00	9,260.00	9,260.00	9,260.00
[illegible]	36,812.23 (n)											
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Projects to be bonded - principal (Town's share)

year	[illegible]	[illegible] Town [illegible]	[illegible] Town [illegible]	[illegible] and gymnasium & other improvements	school addition 1961	school 1964	school 1966	high school addition 1966
1960	[illegible]	[illegible]						
1961	[illegible]	[illegible]	65,000.	20,000.				
1962	[illegible]	[illegible]	63,000.	20,000.				
1963	[illegible]	[illegible]	64,000.	20,000.				
1964	[illegible]	[illegible]	55,000.	20,000.				
1965	[illegible]	30,000.	40,000.	20,000.		12,000.		
1966		30,000.	40,000.	20,000.		12,000.		
1967		30,000.	37,000.	20,000.		12,000.	16,000.	
1968		32,000.	37,000.	20,000.		12,000.	16,000.	
1969		37,000.		20,000.		12,000.	16,000.	16,000.
1970		30,000.		20,000.		12,000.	16,000.	16,000.
1971						12,000.	16,000.	16,000.
1972						12,000.	16,000.	16,000.
1973						12,000.	16,000.	16,000.
1974						12,000.	16,000.	16,000.
1975						12,000.	16,000.	16,000.
1976						12,000.	16,000.	16,000.
1977						12,000.	16,000.	16,000.
1978						12,000.	16,000.	16,000.
1979						12,000.	16,000.	16,000.
1980						12,000.	16,000.	16,000.
1981						12,000.	16,000.	16,000.
1982						12,000.	16,000.	16,000.
1983						12,000.	16,000.	16,000.
1984							16,000.	16,000.
1985							16,000.	16,000.
1986								16,000.
1987								16,000.
1988								
1989								
[illegible]			[illegible]	[illegible]				
						240,000.	320,000.	320,000.
[illegible]			[illegible]			160,000.		
			[illegible]		90,000.			
			[illegible]				80,000.	
		[illegible]	[illegible]					80,000.
[illegible]		[illegible]			200,000.			
		[illegible]		[illegible]				
[illegible]					290,000.	400,000.	400,000.	400,000.
[illegible]				[illegible]	490,000.	800,000.	800,000.	800,000.

Projects to be bonded - interest

year	school addition 1961 (note 4 yrs.)	school 1964	school 1966	high school addition 1966	total from taxes	capital improvements tax rate : $/thousand
1960						
1961	9,280.				94,280.	3.65
1962	6,960.				89,960.	3.25
1963	4,640.				90,640.	3.05
1964	2,320.	9,600.			86,920.	2.75
1965		19,240.			90,240.	2.70
1966		17,280.	12,800.		102,080.	
1967		15,328.	24,336.		111,944.	
1968		15,360.	23,040.	24,320.	126,200.	
1969		14,400.	21,760.	24,320.	124,480.	
1970		13,440.	20,480.	23,040.	120,960.	
1971		12,480.	19,200.	21,760.	97,440.	
1972		11,520.	17,920.	20,480.	93,920.	
1973		10,560.	16,640.	19,200.	90,400.	
1974		9,600.	15,360.	17,920.	86,880.	
1975		8,640.	14,080.	16,640.	83,360.	
1976		7,680.	12,800.	15,360.	79,840.	
1977		6,720.	11,520.	14,080.	76,320.	
1978		5,760.	10,240.	12,800.	72,800.	
1979		4,800.	8,960.	11,520.	69,280.	
1980		3,840.	7,680.	10,240.	65,760.	
1981		2,880.	6,400.	8,960.	62,240.	
1982		1,920.	5,120.	7,680.	58,720.	
1983		960.	3,840.	6,400.	55,200.	
1984		480.	2,560.	5,120.	52,160.	
1985			1,280.	3,840.	37,120.	
1986			640.	2,560.	35,200.	
1987				1,280.	17,280.	
1988				640.	16,640.	
1989						
[illegible]						
	23,200.	192,480.	256,640.	256,640.	2,191,960.	
[illegible]						
[illegible]						
[illegible]						

Assuming that these are realistically scheduled, the increase in the tax rate attributable to these capital expenditures is as shown below.

1961	$3.65
1962	$3.25
1963	$3.05
1964	$2.75
1965	$2.70

The above is based upon a continuation of the yearly increase in total valuation in proportion to that in the past and does not assume any general reassessment of real property. If reassessment occurs or major non-residential real estate is constructed, the total tax rate may be lower; however, the amount to be raised by taxation will not be appreciably reduced by either of these two possibilities.

DETAILS of the Projections

The two tables that accompany this section are schedules projecting the relevant figures for six years in order to develop a plan for meeting new capital expenditures for major items. Table 11-A is a projection of receipts and expenditures without the above list of new projects. The receipts, except for "taxes and assessments" are projected on the basis of the past six years 1954-1959. From the total of the expected expenditures (recurring) the amount required to be raised by taxes was calculated; from the projected assessed valuation the tax rate was then estimated. This rate is that without the new capital expenditures anticipated above but includes the funds needed for debt service for past capital expenditures.

Among the expenditures the two major items are "schools" and "other departments". The school costs were projected by estimating the increase in per pupil costs and the anticipated enrollments. The per pupil costs have risen in the last six years for a variety of reasons including the effect of inflation, the raising of academic curriculum standards and the adjustments of teachers' salaries. The projection of the expenditures of "other departments" has been proportional to that of the past adjusted for the rate of population growth anticipated. This category includes certain recurring capital expenses which are small enough to be met from current revenues.

The Accountant's Report, Recapitulation of Receipts and Expenditures, was used as the source of data for Table 11-A. Non-recurring items have been segregated by footnotes and were not used in projecting the recurring receipts and expenditures. Table 11-B, Suggested Capital Improvements Schedule, outlines a plan for meeting the series of capital expenses making up the capital program. This is scheduled on a yearly basis. Estimated annual expenditures for the program are divided by the projected total valuation to determine the estimated tax rate increment attributable to new capital improvements. This must be added to the estimated base tax rate shown on Table 11-A to determine the estimated total rate.

The Massachusetts School Building Assistance program offers grants to cities and towns for capital expenditures for public schools. In the case of Wayland the grant is fifty percent of the construction costs approved by the State. This is paid by the State to the town in equal principal payments over the life of any bond issue. For any amounts not bonded, the State's part is paid in five equal installments commencing in the year in which construction of the particular school is started. This provides inducements to the town to accumulate as much as possible before construction in order to reduce the long term borrowing and its interest charges. In 1959 Chapter 591 modified the law (Chapter 645) by providing that the State will match in the same year any funds taken from a stabilization fund at a regular town meeting provided the amount appropriated from the stabilization fund is at least $75,000 and that there remains bonded indebtedness covering at least one half of the approved costs of construction. This recent change is an attempt to ease the carrying charges for cities and towns where large capital expenditures have occurred and are to occur. It does not materially affect the situation in which a town wishes to avoid bonded indebtedness by accumulating funds in advance of construction. In this case the State's share is paid in five equal annual payments as described above.

From this it can be seen that for Wayland there are inducements to accumulating amounts in a stabilization fund. In Table 11-B annual accumulations are proposed, part to be taken from the Excess and Deficiency Account and part from current tax revenues. The schedule proposed tends to equalize the tax rate increment attributable to new capital improvements. It is important to point out that this estimate of the tax rate increase attributable to new capital expenditures includes funds taken from current taxes for each year as well as debt service. The amount shown as accumulating in the E. and D. Account is included in the base tax rate shown in Table 11-A.

There is a further discussion of the costs of municipal government in Section 3.